

INSIDE DOPE

by GEORGE F. TAUBENECK

Stories of the Week
Gags of the Week
Verse of the Week
Prayer of the Week
Wisdom of the Week
Political Aftermath
Easy Aces
Merchandising Checkup

Stories of the Week

Mutual good friend, a not-so-dashing businessman whose waistline expands while his forehead recedes, checked in for his regular 5:15 martinis.

Year after year it had been his custom to down two or three quick cocktails after leaving the harassments of his office—then catch a suburban train home. Rarely was this routine interrupted.

By some queer quirk of circumstances a lovely, lonely, blonde sat down beside him. She confessed that her husband had died, and left her a million dollars, but no friends. Sympathetically he listened to her sad story. One thing led to another, and it was 3 a.m. before he got home.

To his wife he made a clean breast of the whole affair—sparing neither himself nor the lurid details.

"A likely story you invented," wife fumed. "How much did you lose in that poker game?"

"Here," this selfsame lady proffered to a tramp, "are a pair of trousers for you. All they need is a bit of mending."

"How long will it take you to mend 'em?" grumbled the spoiled-by-our-age-mendicant.

Gags of the Week

Those jet planes which fly a thousand miles an hour aren't the fastest things on earth. They can't compare with the speed of a rumor or gossip.

"The world is divided into people who think they are right."—HERBERT HOOVER.

Verse of the Week

"We may live without poetry, music and art;
We may live without conscience and live without heart;
We may live without friends; we may live without books;
But civilized man can not live without cooks.
He may live without books . . . what is knowledge but grieving?
He may live without hope . . . what is hope but deceiving?
He may live without love . . . what is passion but pining?
But where is the man who can live without dining?"—EDWARD R. B. LYTTON.

Prayer of the Week

What we'd all like:
1952 wages.
1932 prices.
1926 dividends.
1910 taxes.

Wisdom of the Week

"A man's ability usually is rated by what he finishes and not by what he starts."—CHARLES E. WILSON.

"Man is never as unhappy as he thinks he is, nor as happy as he expects to be."—GOETHE.

"Good health, a sound mind and an inner sense of peace and godliness—these are the essentials of good living. Seek these and all other really good things will fall into their proper places behind them."—ROY L. SMITH.

"Whoever aspires to understand man—that eternal tramp, a thing essentially on the road—must throw overboard all immobile concepts and learn to think in evershifting terms."—JOSE ORTEGA Y GASSET.

"How busy is not so important as why busy. The bee is praised; the mosquito is swatted."—National Safety News.

"To go about your work with (Concluded on Page 7, Column 3)

ISSUED EVERY MONDAY AT 430 W. FORT ST., DETROIT 26, MICHIGAN. ESTABLISHED 1926.



AIR CONDITIONING & REFRIGERATION News

Vol. 65, No. 2, Serial No. 1243

January 12, 1953

Subscription Price, \$5 Per Year

Reentered as second-class matter October 3, 1936 at the post office at Detroit, Michigan, under the Act of March 3, 1879.

Trade-Mark Registered U. S. Patent Office. Copyright 1953, by Business News Publishing Co.

Amana To Triple Freezer Output, Add 8,000 Outlets

CEDAR RAPIDS, Iowa—Details of a \$3,500,000 expansion program that will more than double the size of its plant and treble its production of food freezers were reported recently by Amana Refrigeration, Inc., to 700 distributor representatives at the firm's annual meeting.

At the same time, a \$2,250,000 advertising schedule, new 1953 sales training, sales promotion, and home economics programs, and plans to boost the number of Amana dealers from 7,000 to 15,000 were outlined to the distributors. The meeting was held at the Cedar Rapids Memorial Auditorium.

Oct. 1, 1953, is the scheduled completion date for the expansion, according to George C. Foerstner, executive vice president.

New buildings will add 200,000 sq. ft. of floor space to the factory's present 170,000 sq. ft., he said. Installation of new, modern high-speed machines and tools, will make possible increasing output by 300%, he stated.

Total output will exceed 1,000 freezers a day, Foerstner predicted.

To sell Amana's "vast increase in production," E. L. Hinchliff, sales manager, said the company soon (Concluded on Back Page, Column 1)

Leonard Introduces Expanded '53 Line

DETROIT—The 1953 line of Leonard refrigerators and electric ranges "incorporates the broadest combination of proven sales features in the company's history," according to F. E. Howell, sales manager of the Leonard Div., Nash-Kelvinator Corp.

In addition to its established lines of refrigerators, ranges, chest-type freezers, and electric water heaters, Leonard will offer for the first time in 1953 a complete kitchen cabinet line, an upright freezer model, and a room air conditioner, Howell said.

Features of the 10 new Leonard refrigerators include "maximum refrigerated storage space in a minimum amount of floor space," top-to-base refrigeration, special storage areas for frozen foods and high moisture-content foods, a built-in butter chest, sliding shelves, door storage, "Magic Cycle" self-defrost.

Twist is Gen. Sales Mgr. (Concluded on Back Page, Column 5)

Window Units Give Worthington Complete 3/4 to 25-Hp. Line

HARRISON, N. J.—A new line of window type room air conditioners in both $\frac{3}{4}$ and 1-hp. sizes was introduced recently by Worthington Corp. here to give the company a complete line of package units ranging from $\frac{3}{4}$ to 25 hp.

Features of the new units are one-dial control, directional air flow, and automatic step-down control for night operation.

The 1-hp. unit has a built-in thermostat, while the thermostat is optional in the $\frac{3}{4}$ -hp. size.

At the same time Worthington's air conditioning and refrigeration division has also introduced into its line:

Residential air conditioners in 3 (Concluded on Page 17, Column 2)

Biggest Jam In Years Hits Chicago Marts

CHICAGO—Biggest jam in years, almost comparable to the years right after the end of World War II, marked the opening of the Winter Homefurnishings Markets at the American Furniture Mart and the Merchandise Mart here Jan. 5.

And, in contrast to last year's theme song—"I don't want to set the world on fire, I just want to burn down my warehouse," the distributors and retailers at this January, 1953 market who managed to fight their way off the elevators to the appliance display floors were ready to talk about buying.

"There's more interest in carload buying," said one veteran of 20 years

(Some of the new major appliance products introduced at the Chicago Markets are described in more detail on pages 14 and 15 of this issue.)

of markets, "than I've ever seen before. This is indicative mainly of the fact that inventories are in good shape, and that retailers have confidence in 1953 business, but it also reflects the fact that manufacturers have developed better situations on split-cars and the like which make carload buying more attractive to dealers.

"Another indication that retailers think that '53 retail business will be on the upgrade is that retailers are (Concluded on Page 29, Column 1)

Sherer Promotes Bower; Twist Is Gen. Sales Mgr.

MARSHALL, Mich.—Announcement has been made by J. H. Coolidge, president of Sherer-Gillett Co., of added duties to be assumed by L. O. Bower which will carry with them the title of assistant to the president, in addition to that of vice president which he now holds.

Coolidge also announced the appointment of John S. Twist as general sales manager of the company.

In his new capacity, Bower will take over much of the administrative and planning work formerly handled by the president.

Bower joined the company in 1943, became sales manager in 1944, and (Concluded on Back Page, Column 5)

Tecumseh Alters Jobber Policy, Consolidates Lines

TECUMSEH, Mich.—Consolidation of the "Tecumseh" and "Marion" (Universal Cooler) lines of compressors and units into a single line and a new jobber policy for selling the consolidated line were announced recently by Frank K. Smith, director of sales for Tecumseh Products Co.

The new jobber policy involves setting up "selective wholesalers" to handle the new single line plus replacement parts in their territories. Only these wholesalers will be able to (Concluded on Page 29, Column 3)

Philco To Build New Refrigerator Plant

BOCA RATON, Fla.—William Balderston, president, Philco Corp., announced recently Philco will build a new plant for the manufacture of refrigerators and home freezers at Connersville, Ind. The announcement was made at a convention of Philco distributors at the Boca Raton hotel here.

The new Connersville plant will cost approximately \$4,000,000 and should be in operation before the end of 1953, Balderston said. It is designed to increase Philco refrigerator (Concluded on Back Page, Column 4)

Mayer Heads Koch Board, Litman Named President

NORTH KANSAS CITY—The appointment of Millard Mayer as chairman of the board and of Chester K. Litman as president has been announced by Koch Refrigerators, Inc. here.

Mayer was formerly president of Koch, and Litman, vice president. Robert M. Bell is now vice president.

Mayer, who has been with Koch since 1917, is also president of the Commercial Refrigerator Manufacturer's Association. Litman, a Harvard graduate and registered professional engineer, is a member of the American Society of Refrigerating Engineers. He has served Koch 17 years in distributor sales, production engineering, and plant production. Bell has been with Koch for 18 years.

Westinghouse Unveils '53 Appliance Lines

New Features Included In 3 Upright Freezers, 2-Door Combination Unit

MANSFIELD, Ohio—An 11.4-cu. ft. two-door combination refrigerator-freezer with automatic defrosting and automatic temperature controls for both the freezer and refrigerator compartment headlines the 1953 line of seven new refrigerators just announced by Westinghouse Appliance Div.

The company is also introducing a line of three upright home freezers with new-type storage conveniences and a built-in "Freeze-File" for accurate inventory of stored frozen foods.

In addition, Westinghouse disclosed these other developments:

1. An electronically-controlled electric range surface unit which is claimed to "banish pot-watching" and enable "cooking-without-looking" on the top of the range.

2. Two automatic defrosting refrigerators with electrically-operated door latches which eliminate the conventional door handle. They open by a slight touch of a door plate.

3. Addition of a portable, fully automatic dishwasher identical to the newly styled dishwasher line. It is a 24-in. free-standing model on casters and with connections for hot water and drain.

The new developments were reported by R. J. Sargent, manager of major appliances, as details were (Concluded on Page 31, Column 1)

Frigidaire Shows Advance Models

DAYTON—Four advance models of Frigidaire's new 1953 appliance line, including a new two-door "Cyclomatic Imperial" food freezer-refrigerator combination, a standard refrigerator with full-width food freezer, and two improved 30-in. electric ranges are being shown at the Chicago Furniture Mart, according to H. F. Lehman, general sales manager.

The complete 1953 Frigidaire line, the most extensive in over 30 years, will be introduced to Frigidaire distributors and dealers starting in January," Lehman said. "Both the new refrigerators and ranges are packed with advance engineering design features and in addition, color (Concluded on Page 19, Column 1)

\$1,000,000 Road Show Promotes Servel Line

EVANSVILLE, Ind.—A million-dollar musical extravaganza will go on the road this month to show Servel's line of appliances to dealers from coast to coast, W. Paul Jones, president of Servel, Inc., announced.

He said that two road companies (Concluded on Back Page, Column 5)

New Air Conditioner Units Provide Year-Round Comfort for Home Market

Window Units Give Worthington Complete 3/4 to 25-Hp. Line

G-E Covers Field With 190 Models

NEW ORLEANS—A completely new line of residential year-round air conditioning equipment featuring an extensive range of models was announced here recently by General Electric at the first of a series of distributor meetings.

The new line covers over 190 models in a wide range of heating and cooling capacities that can fit the year-round indoor climate requirements of any size house in any locality.

S. J. Levine, general manager of the G-E Home Heating and Cooling Dept., said the new G-E residential year-round air conditioners give builders and homeowners a flexibility of choice in selecting the unit that best meets their particular heating and cooling problems.

For example, he said, in warmer (Concluded on Page 17, Column 3)

Servel Bows All-Year Air Conditioning Unit, Window Cooler, Chiller

CHICAGO—All-Year air conditioning for homes in the price range of \$10,000 to \$14,000 will be produced this year by Servel, Inc. It was announced here recently. The company will market a new, two-ton gas fired unit capable of providing summer and winter air conditioning for an average six-room home.

John A. Gilbreath, assistant vice president, in charge of air conditioning told distributors at the firm's second annual air conditioning sales convention that design and engineering problems had been overcome to make all-year living comfort available to the nation's large mass home market.

At the same time he disclosed that (Concluded on Page 29, Column 2)

I-H Window Units Can Be Covered In Fabric

CHICAGO—International Harvester in 1953 will enter the room air conditioner field with $\frac{1}{2}$, $\frac{1}{4}$, and $\frac{3}{4}$ -hp. "Decorator" models priced at \$229.95, \$309.95, and \$359.95, respectively, the company disclosed last week.

I-H is also introducing a dehumidifier carrying a suggested retail price of \$129.95.

The air conditioners, similar in decorating principle to the company's new Decorator refrigerators, can be covered in any fabric to match or blend with curtains, draperies, floor coverings, or upholstery.

All three models have removable spun glass filters and are powered by I-H's "Tight-Wad" refrigerating unit.

The $\frac{1}{2}$ and $\frac{3}{4}$ -hp. models (L-500 (Concluded on Page 29, Column 5)



The Answer at the Crossroads

THE SIGNS are unmistakable: appliance retailing has again reached a crossroads—a place of decision.

Business has toughened up. The eager, waiting spenders that prompted thousands of opportunists to open shop are no more. People are today buying critically. Appliance retailing now, more than ever, becomes a challenging opportunity . . . with great and lasting rewards for the right kind of dealers.

And, seeing that opportunity, the right kind of dealers are prompted to stop, think, and take stock of their future needs . . . and look for a sound answer.

Kelvinator is ready with that answer . . .

Ready with a broadened line of appliances—refrigerators, ranges, freezers, kitchen cabinets, sinks, garbage disposers, water heaters, dehumidifiers, room air conditioners. And coming soon—a complete line of laundry equipment including automatic and wringer type washers, driers, ironers.

Ready, too, with a retail-minded franchise that assures cooperation, and pledges an *adequate market* for every dealer with a challenging volume opportunity on each product in the Kelvinator line.

Ready with the most powerful advertising support in Kelvinator history; with an intensified program of marketing assistance; with a proved plan for replacement selling and an unmatched program for building a strong, competent retail selling organization.

Those are the highlights of Kelvinator's answer to the dealers' needs in this crossroads year of 1953. They reveal, without decoration, the kind of honest tools Kelvinator dealers have at their command for the sharper sales contest ahead.

Look over the Kelvinator new product parade on the following pages. Then, if you would like the complete Kelvinator story as it applies to you, we'll be glad to give you the facts . . . *in confidence*.

THERE IS A BETTER FRANCHISE...

IT'S **Kelvinator**

Division of Nash-Kelvinator Corporation, Detroit 32, Michigan.

THE MOST VALUABLE FRANCHISE IN THE APPLIANCE INDUSTRY

Refrigerators • Ranges • Freezers • Water Heaters • Dehumidifiers • Kitchen Cabinets • Sinks • "Electro-Drain" Garbage Disposers • Room Air Conditioners

Join the *Kelvinator*

NEW!

KELVINATOR
REFRIGERATORS

Kelvinator presents a brand-new family of feature-filled refrigerators, all similarly styled . . . strikingly beautiful. There are four all-new "Magic Cycle" Models with new roll-out dairy shelves, built-in butter chests, full-width 5-wall freezers, twin "Moisture-Seal" crispers of tough chip-proof Polystyrene. New 2-door combinations—a home freezer and self-defrosting refrigerator in one compact cabinet—plus large-space conventional models all with Cold-Clear-to-the-floor design, and the plus features that have made Kelvinator the women's favorite through the years.

NEW!

KELVINATOR
ELECTRIC RANGES

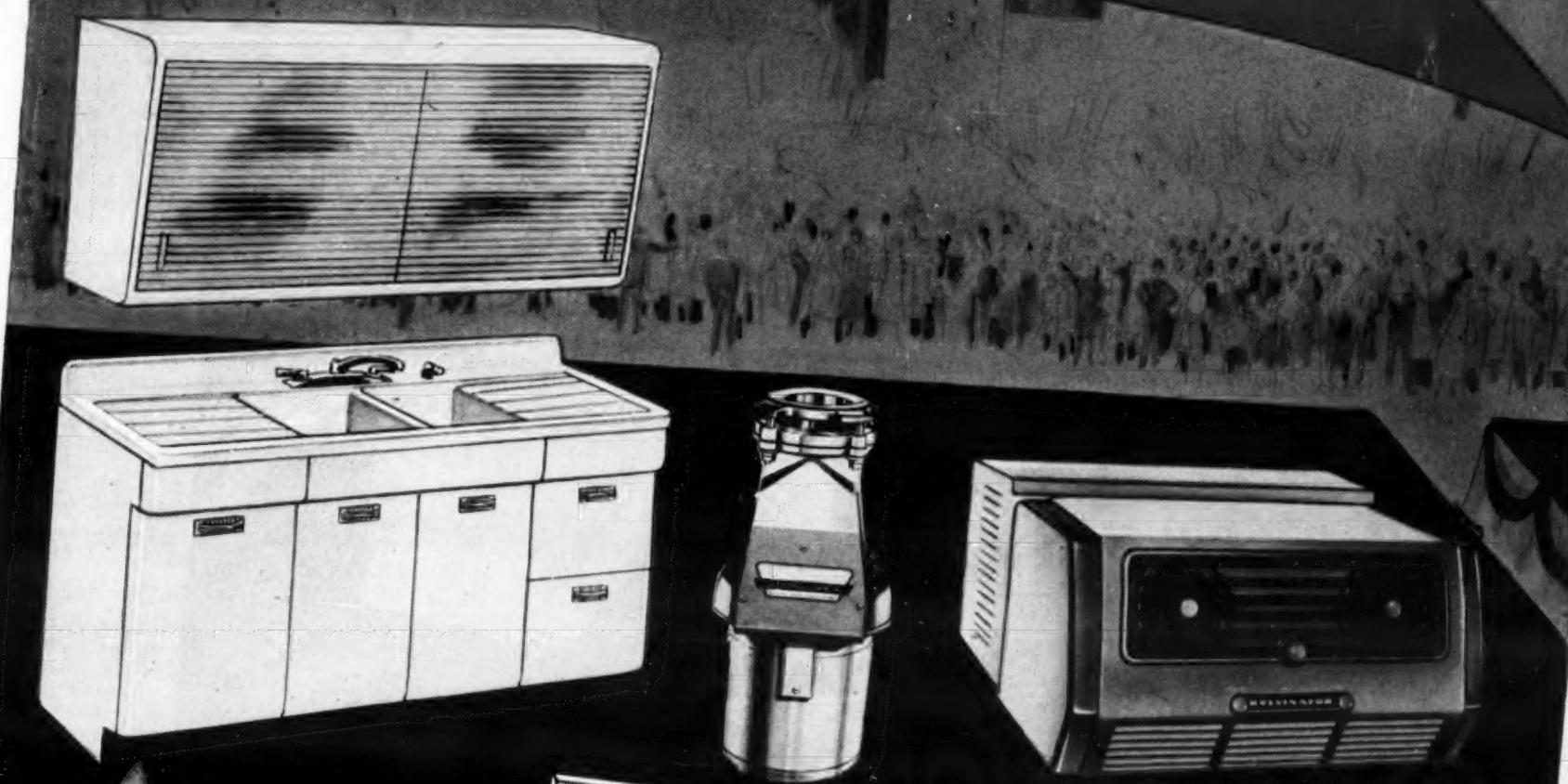
A sensational new line that includes two 30-inch models with the giant "Great Scot" oven that's a whole roast wider than most; double-oven models and standard size single-oven models. All have exclusive convenience and quality features found only in Kelvinator, and models that bridge the price span from price leaders to the luxury level.

NEW!

KELVINATOR
HOME FREEZERS

The world's most dependable home freezer in compact chest-type models, and a brand-new, large-capacity upright model. Kelvinator freezers that have 5-wall freezing sq foods are literally wrapped in a blanket of cold . . . for greater protection . . . faster freezing. And all Kelvinator Home Freezers are backed by the industry's longest pioneering experience in producing low temperature cabinets.

parade to better business



NEW!

**KELVINATOR
KITCHEN CABINETS
AND SINKS**

They're sensationaly beautiful! The customer can install cabinets himself! A complete line of wall cabinets, base cabinets and sinks in all standard widths. Made of rugged steel with lifetime, baked-on enamel finish. Pantry-ettes (wall cabinets) feature fluorescent lighting, sliding translucent glass doors! They're traffic builders for any store!

NEW!

**ELECTRO-RAIN
GARBAGE DISPOSERS**

Chews the garbage up and flushes it down the drain. Frees housewives from the messy bother of garbage disposal. Designed for any Kelvinator sink and will fit practically all other makes. Another great, new sales-Better Business.

NEW!

**KELVINATOR
AIR CONDITIONERS**

Another brand-new product in the Kelvinator Parade. It's designed with beauty in mind—and designed to provide more cooling at no more cost. Competitively priced . . . it has features to be found on no other air conditioner. And—it's an opportunity for Kelvinator retailers to get in on a growing and profitable hot-weather business!

THERE'S STILL MORE!

Join the Kelvinator *parade to better business!*

NEW!
KELVINATOR
WATER HEATERS

Available in either round or cabinet types. A full range of sizes. Kelvinator water heaters are built to provide more hot water at less cost, with cold-water baffle, heavy Fiberglas insulation, heavy-gauge steel tanks. Everyone's a sales getter. Get your share of the profitable water heater business with Kelvinator!

NEW!
A COMPLETE LINE OF
KELVINATOR
HOME LAUNDRY
EQUIPMENT

Really big news from Kelvinator. Soon Kelvinator will show to dealers the most modern line of laundry equipment, including an automatic washer, conventional washers, ironer and drier—everything the dealer needs to compete in this big phase of the appliance business!

Each of these products in its own field adheres to Kelvinator's long established standard of quality. But even more important is the retail-minded franchise that stands behind them.

Does what you have seen and read challenge your interest? You are invited to send

for the complete story of the Kelvinator franchise and its unusual provisions for your business security and progress in the new selling era ahead.

Your inquiry will be held in strict confidence. Nash-Kelvinator Corporation, Kelvinator Division, Dept. AC-13, Detroit 32, Michigan.

Refrigerated Vendors

Dispensers for Products from Ice to Fruit Increasing In Number, Patronage; Sales Cost Cuts Noted

CHICAGO — American consumers are dropping more and more coins into vending machines, including the refrigerated type.

For example, sales by mechanical salesmen dispensing beverages in a paper cup totaled around \$81 million in 1951, compared with less than \$42 million four years ago.

Or take ice-vending stations. Until about four years ago, most ice vendors were located at ice plants, where they released a man for other duties, it was pointed out by Donald Rose, sales manager for F. B. Dickinson & Co., manufacturer of such equipment.

Today, he said, "ice companies are spotting stations around at good locations away from the plants, and they're selling crushed ice and ice cubes in bags. Must be about 1,000 stations out now."

A manufacturer of milk vendors sees increased sales from these machines as they appear in new locations, such as large apartment houses. He thinks supermarkets eventually will install them in their parking lots for the convenience of after-hours customers and those wanting to buy milk only.

LOWER MILK PRICES CLAIMED

Incidentally, one machine producer claims that milk vendors can lower the cost of getting a bottle of milk to the consumer by three cents a quart. Some of that savings, he says, could be passed on to the user.

This statement emphasizes one of the reasons why the vending machine business has become a big one: the increasing cost of retail sales employees. According to government figures, the average wage of such personnel has risen from around \$1 an hour, on the average, in 1947 to \$1.32 as of last July.

Many of the dispensers now on the market offer the customer several choices. For instance, four kinds of refrigerated fresh fruit are supplied by one of the newest machines. And it can serve four customers at the same time.

HOT AND COLD DRINKS

On a Chicago subway platform is a vendor that provides cold fruit juice in the summer and hot soup or hot chocolate in the winter. Patrons of a dispenser called the "Lunch-O-Mat" can get fruit juice, milk, coffee, hot and cold sandwiches, pie, and pastry. Other machines give the customer a cola, a soda pop, or a fruit juice.

One of the newest developments in the field is a bottle de-capping device dreamed up by Vendo Co. engineers. By means of this mechanism, the top of the bottle is removed, the contents poured into a cup, and

JUST ASK US!
Turn to "What's New" Page for useful information on new products.

the bottle moved below for later collection.

Coca-Cola Co., which, like Pepsi-Cola, sells syrup for machine mixing, is said to be interested in the device. The development is seen giving coke bottlers an opportunity to compete with syrup salesmen for the machine markets.

An idea of how the vending machine operators are making out these days can be gained from considering one account of D. C. Moore, Rockford, Ill.

34 MACHINES IN 1 PLANT

Thirty-four of the 300 machines Moore has in Rockford industrial plants are in the plant of W. F. & John Barnes Co., manufacturer of hydraulic equipment and machine tools. There, Barnes' 800 employees patronize Moore's coffee, soft drink, gum, candy, peanut, and cigarette machines.

"We have to fill the coffee machines twice a day," he commented. "They'll drink about 1,200 cups in an average day, compared with about 700 cold drinks, and they'll eat as many as 600 candy bars a day. It's a good deal for me."

And it's a good deal for the manufacturer, too, Moore added. He explained that the company gets a commission on gross sales which goes into its athletic fund to help sponsor dances, basketball teams, etc. "I'd say the fund gets \$175 a month off those machines," he observed.

5 Admiral Appointments Reflect Its Expansion In Appliance Field

CHICAGO—Admiral Corp.'s expansion in the appliance field recently with new lines of home freezers, electric ranges, room air conditioners, and dehumidifiers, is reflected by the appointment of two new sales managers, two sales promotion managers, and an assistant to the advertising vice president, the company reported.

W. C. Johnson, sales vice president, appointed William B. Doyle, sales manager of the new home freezer division, and William P. Mackle, sales manager of the new range division.

Doyle formerly was sales manager of the company's San Diego distributing division, while Mackle was appliance sales manager of Admiral-New York. Johnson said another sales manager will be named for the air conditioner and dehumidifier lines.

Other appointments include J. J. Patain, former assistant to Seymour Mintz, vice president-advertising, to sales promotion manager of the appliance division; John B. Ottman as sales promotion manager of the radio-television; and Alfred A. Medica as assistant to Mintz.

INSIDE DOPE

by GEORGE F. TAUBENECK

(Concluded from Page 1, Column 1)

pleasure, to greet others with a word of encouragement, to be happy in the present and confident in the future; this is to have achieved some measure of good living." — R. R. Magazine.

Political Aftermath

The American Federation of Labor and the CIO make public—in every congressional campaign—the names of the candidates they endorse or oppose. Furthermore, they publicize the votes those members have cast in Congress for specific items of labor legislation.

Next, the two BIG national labor organizations send into congressional districts \$5,000 here and \$10,000 there for the campaigns of candidates who TOE THEIR LINE.

They send money to the campaign funds of Senators and Representatives who have voted their way on labor—boss-approved legislation. And they contribute money to defeat those members of Congress who have refused to bow to labor-union demands.

Obviously, this practice needs to be curbed.

Congress could limit campaign contributions from any single source to

a maximum of 10 dollars each. Let the two national political parties solicit such contributions—not just once every four years—but throughout every year. Let the national parties organize permanent staffs and fundraising machinery. Periodic drives to provide campaign funds for members of Congress, as well as for presidential campaigns, could be arranged.

Surely there are two million public-spirited citizens who would give 10 dollars each to a national political party. If so, they would provide \$20,000,000 for presidential and congressional campaigns. (Public disclosure of sums collected and expended should, of course, be required by law every six months.)

In this way, no rich contributors (like the wealthy labor unions) could "own" a public servant. And no pressure group would be permitted to bludgeon members of Congress into voting a certain way—by promising to extend or withhold financial support for political campaigns.

Mr. Subscriber: What are YOUR suggestions?

Easy Aces

"Never worry because a rival imitates you. So long as he follows your tracks he can't pass you."—Professional Engineer.

"One of the nation's greatest weaknesses is its chronic failure to attract for public service men of outstanding political talents and moral qualities. Too often the conscientious voter is forced to realize that the best he can do is to designate on his ballot the lesser of two evils."—Commonweal Magazine.

"I like to think of how wisely man fails to be moved by the logic of so-called compelling facts. Consider kissing—surely one of life's rare delights."

"Now all the compelling facts of science, of hygiene, and of bacteriology frown upon, if not condemn outright, the act of kissing. Fortunately the average man is not moved by the compelling knowledge or logic of the scientist—so, he kisses."—DR. IAGO GALTSON.

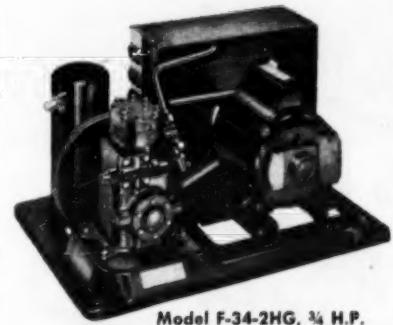
Merchandising Checkup

"Wholesalers of every line of merchandise are acutely aware of the tendency, particularly since the weakening of the fair trade laws, of volume to drift from independent dealers to larger outlets, usually multiple unit operations. Wholesalers and their salesmen are devoting a major part of their time and effort to the education of independent dealers to modern merchandising methods, so that they may remain on the scene as an outlet for the products of national advertisers and as customers of wholesalers."

"I am sure that many advertisers, as well as all wholesalers, are alarmed at the dangerous trend of the bulk of the business on packaged goods falling into the hands of the few, rather than the many. The further this tendency grows, the less control the advertiser will have over his trade-mark and his selling policies."

"If monopoly of distribution is accomplished by the giants in the retailing field, the price and policy will be established by the customer rather than the producer."—H. C. VAN ARSDALE, Smith, Kline & French.

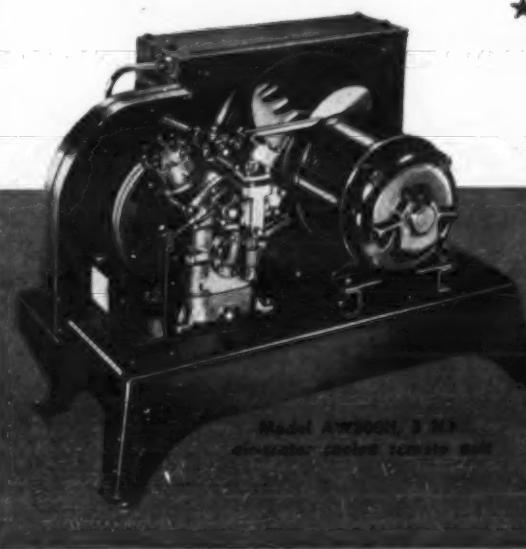
Now... a Tecumseh CONVENTIONAL UNIT For All Applications up to 15 H.P.



Model F-34-2HG, 3/4 H.P. self-contained unit



Model 50H, 1/2 H.P. air-cooled remote unit



Model AW3000, 3 H.P. air-cooled remote unit

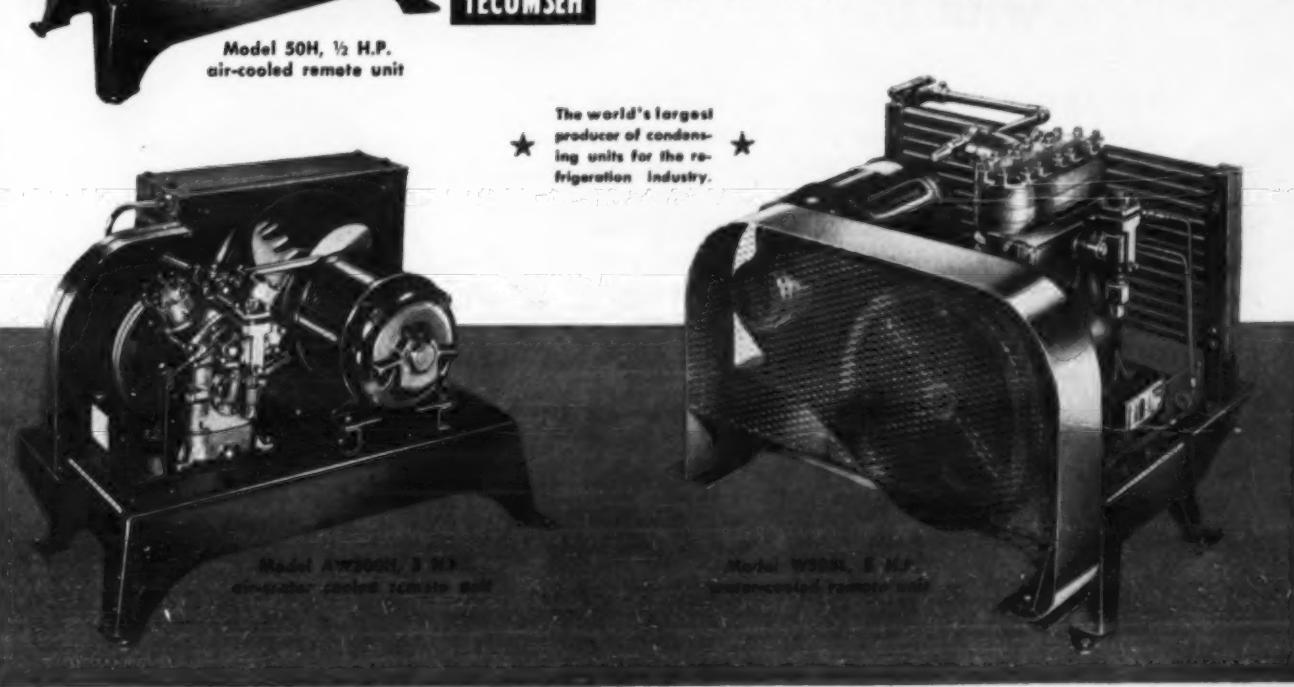
TECUMSEH PRODUCTS
TECUMSEH, MICH. Company

EXPORT DEPT.: 2111 WOODWARD AVE., DETROIT, MICH.

The world's largest producer of condensing units for the refrigeration industry.

★ ★

Model WS300, 8 H.P. air-cooled remote unit



YOU CAN'T BEAT THE VICTOR

CONVENTIONAL MILK COOLERS

• Workhorse of Milk Coolers

• Proven Performance

• Proven Economy

• Proven Scalability

• Sizes: 3, 4, 6, 8, 10, 12 can and up to 20 can, upon order

For information write:

Victor

PRODUCTS CORPORATION
HAGERSTOWN, MARYLAND

MANUFACTURERS OF THE FAMOUS VICTOR QUICKFREEZE



When They Try 'Em, They Buy 'Em

'Loan Out' System Sells Packaged Units For Dealer In Small Mississippi Town

CLEVELAND, Miss.—Offering to install 3 and 5-ton packaged air conditioners, as well as room units, on a trial basis has helped Ed Kossman, owner of Kossman's here, rack up a substantial air conditioning volume each year.

Though his small community has less than 7,000 population, Kossman last year set several records in sales of both commercial air conditioning installations and room units.

Among the more remarkable of the Frigidaire dealer's accomplishments was the selling of nine 5-ton and 3-ton units in a single day, during the hot summer of 1951.

This was achieved after Kossman made a tour of retail stores in the downtown Cleveland shopping district and remarked to himself how few customers were on hand for shopping, and the general listlessness on the part of the store employees.

While he had, of course, worked the district before, the market now looked more promising than ever be-

fore. So Kossman armed himself with a complete set of books, photographs, testimonial letters, etc., and went out to retrace his steps.

In a local supermarket, he talked so eloquently that he landed an order for a 10-ton cooling job, utilizing two 5-ton ducted package units. Then he moved on to a pharmacy, plugging the "keep up with the Jones'" angle strong enough to land a similar order. Next came calls on a variety store, a theater, another small department store, and another grocery store. Before the day was over, Kossman sold no less than nine air conditioning units ranging in size from 3 to 15 tons.

Since that day, through intelligently presenting the idea that all merchants in the area would benefit from air conditioning in their stores, he has sold a very satisfactory number of cooling jobs.

One of Kossman's most effective merchandising methods has been the free-trial offer. The firm will, if necessary and if the prospect is a good

one, assume all the risk of the "loan-out" form of demonstration—even where 5-ton units are needed.

In dozens of commercial installations, Kossman has encountered only one flat refusal to go ahead with the purchase, and he feels that the merchant in this case couldn't have paid for the equipment due to serious financial reverses. Thus, all of the "loanouts," except for a few isolated instances, have netted a sale.

"We actually are selling at least nine such prospects out of every 10," Kossman said. "Once the business gets accustomed to finding the store interior cool and pleasant and receives a few compliments from pleased customers, it becomes difficult for him to part with it."

"In this way, plus the use of such arguments as the fact that air conditioned stores are doing two and three times the volume of those which are not cooled, we have managed to successfully air condition almost every store in the city."

Naturally, it has required careful planning and good prospecting to insure that the customer for whom a "loanout demonstration" is made is logically an air conditioning prospect.

The same plan is used in selling the domestic market. The firm will install package cooling in any combination wherever a consumer owns his own home—and the sales ratio has been just as high as in the commercial field.

Plan Cooling for Drive-In

FT. LAUDERDALE, Fla.—Dowmar's Drive-Inn, to be built soon adjacent to the Coral Shopping Center at Oakland Park Blvd. and U. S. 1, will be completely air conditioned.

Remodeled Drugstore Serves 200 Luncheon Customers a Day In Air Conditioned Comfort

WACO, Texas—By doing some store remodeling in addition to increasing the tonnage of the air conditioning system, Ottis Stahl Pharmacy here has completely solved the problem of objectionable odors in its fountain-restaurant.

Ottis Stahl, owner of the outstanding drugstore, which features deluxe toiletries departments, gift shops, along with a 50-person-capacity restaurant, allocated some \$10,000 to remodeling of the firm's food service facilities.

Anxious to develop a fountain-luncheonette which could compete with any restaurant in the city, he checked off all of the "drawbacks" which normally occur in drugstore food service, and spared no expense in overcoming them.

One of the worst, he indicated, has been the emission of unpleasant cooking odors throughout the rest of the store, as well as the fountain itself. Accordingly, a partitioning wall was installed across the back of the store providing space for an 18 by 12-ft. kitchen. Completely equipped with stainless steel, the kitchen is entirely visible through a 6 by 6-ft. plate glass window in the center, and is thus constantly "on display."

To prevent the circulation of odors, the Texas druggist then installed a 3,500 c.f.m. exhaust fan in the ceiling of the kitchen. Cooled air from the drugstore proper is pulled through at high velocity through a narrow service window slit in the bottom of the plate glass "kitchen display window."

The 20-ton store air conditioning system was increased by 5 tons output capacity to compensate for the constant drawing off of the kitchen fan.

Now, no matter what food preparation is going on in the kitchen, all odors stop short at the service window. Even when a full-size door to the right of the window is opened, there is still no noticeable penetration of such odors.

Likewise of high interest is the \$4,000 stainless steel backbar fixture which the Texas druggist installed behind the fountain. Designed to do away altogether with the problem of equipment, foods, bottles, etc., set here and there around the fountain, it contains 11 compartments down its 24-ft. length.

In the center section are three cooled compartments which operate at 32°, and an 11-cu. ft. freezer compartment, operating at -10°. A 1½-hp. compressor with separate thermostats and by-pass valves provides power for both. Because of the high capacity for frozen foods which the second compartment permits, the store is able to keep on hand large quantities of frozen seafoods, chicken, etc., to guard against embarrassing "run-outs" or particularly heavy food service traffic.

With eight plastic upholstered booths, nine tables, and 14 stools at the fountain, the pharmacy is now averaging 200 and 225 luncheon customers per day, with an average check of around 75 cents.

IF YOU WERE Your Prospect which tag would sell

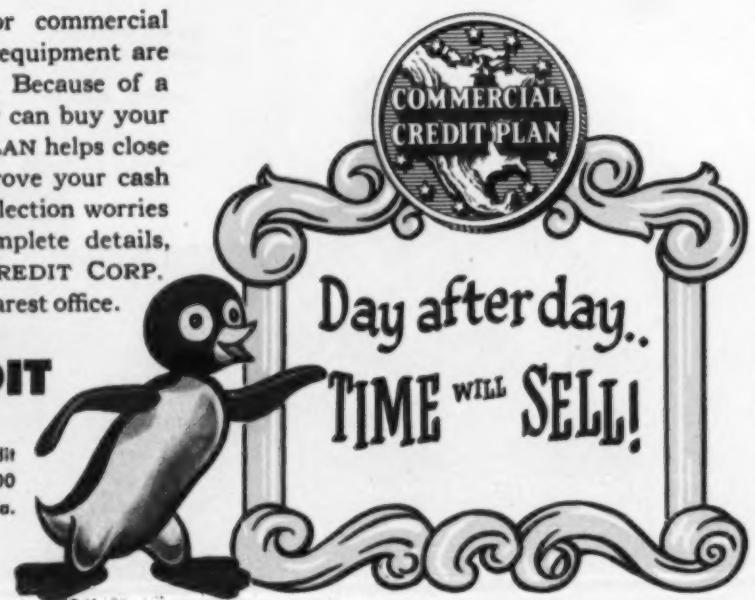


**Feature Time Payments to close more sales
with the COMMERCIAL CREDIT PLAN**

MORE AND MORE prospects for commercial refrigerating and air conditioning equipment are becoming, of necessity, TIME BUYERS. Because of a tight cash position it's the only way many can buy your equipment. The COMMERCIAL CREDIT PLAN helps close sales . . . lower accounts receivable, improve your cash position. And you turn your credit and collection worries over to COMMERCIAL CREDIT. For complete details, facts and figures, write COMMERCIAL CREDIT CORP., 14 Light Street, Baltimore 2, Md., or our nearest office.

**COMMERCIAL CREDIT
CORPORATION**

A service offered through subsidiaries of Commercial Credit Company, Baltimore... Capital and Surplus over \$125,000,000... offices in principal cities of the United States and Canada.



World's Largest Regional Shopping Center Will Have 3,600 Tons of Cooling Worth \$1.5 Million

SYRACUSE, N. Y.—The biggest cooling machines ever designed for air conditioning a business building are being built by Carrier Corp. for installation in the world's largest regional shopping center, now under construction in the Detroit area.

This was announced recently by Cloud Wampler, president of Carrier, the nation's leading air conditioning firm, with the signing of a \$1,414,000 order for the installation.

The project is the \$20,000,000 Northland Center regional shopping center being built by The J. L. Hudson Co. of Detroit, one of the nation's leading department stores and second largest department store in the world.

Wampler revealed that the two giant centrifugal cooling machines will provide 3,600 tons of cooling capacity. The two huge machines—11 ft. high by about 14 ft. wide by 20 ft. long—will handle air conditioning requirements for all of the buildings currently under construction in the vast 161-acre Northland Center project, located at Eight Mile and Greenfield Roads and Northwestern Highway in Detroit.

The entire project is under way. Now rising is the central Hudson store of three floors and basement, totaling about 10 acres of floor space, plus five additional one-floor buildings which will house 70 tenant stores and restaurants. Total floor area of the buildings is nearly 1,000,000 sq. ft.

Chilled water from the Carrier centrifugals will be circulated through underground mains to each of the buildings in the project and will be supplied to tenant buildings for their air conditioning use on a metered basis.

The air conditioning system for the Hudson store itself will use an ultra-modern high pressure system recently perfected by Carrier for department stores. It involves the biggest air conduits ever fashioned for this purpose.

Thirty-two wheels ranging from a foot to nearly six feet in diameter will distribute nearly half a million cubic feet of conditioned air every minute, or enough in a day to air condition an average-size house for more than a year. The air will pass through nearly 11 miles of conduits and ducts for distribution to the conditioned areas.

Another 11 miles of chilled water tubing will be used in cooling coils to remove excess moisture and cool the air.

Two powerful centrifugal compressors driven by 1,000-hp. motors will flank and be tied directly into the same condenser and cooler assembly in each of the machines. Either of the compressors may be shut down, providing greater flexibility of operation.

In addition, each compressor will vary its output according to the amount of cooling needed.



JORDON Refrigerator
Company
58th and Grays Ave., Phila. 43, Pa.

If it's JORDON
it's Reliable
Refrigeration!

Write for Complete Catalogue and Price List

FIRST PICTURE

of the sensational new 1953 Carrier Room Air Conditioner
that's different...different...different...all the way through!



there's a difference you can see

The new Carrier mounts flush with the sill, occupies no space in the room. And because there are no side vents or top vents, the new Carrier can be installed in more than a dozen new and different ways!

a difference you can feel

The new Carrier delivers air that is cooler, drier, more absorbent — cooler and drier by actual test. A revolutionary new two-step airflow cools twice, filters twice, dehumidifies twice — on the way in and on the way out!

a difference you can hear

The new Carrier is the quietest ever built. Moving parts are precisely balanced, ride in rubber. The entire cabinet is insulated all the way round. And an exclusive sound-trap keeps noise out.

a difference you can sell

Sell the Room Air Conditioner with the differences that sell . . . built by the people who know air conditioning best . . . and become the air conditioning leader in your community. The coupon can start you on your way!

CARRIER CORPORATION
310 S. Geddes Street, Syracuse, New York

I want to sell that sensational new Carrier Room Air Conditioner. Please send the name of my nearest Carrier distributor.

Name _____

Street _____

City _____ State _____

Carrier

FIRST NAME IN AIR CONDITIONING

G-E Shows Two 220-Volt Clothes Dryers Which Can Be Adapted to Low Voltage

LOUISVILLE, Ky.—Two new General Electric automatic clothes dryers which operate on 220 volts but which may be adapted for 110-volt operation have been announced by James H. Goss, general manager of the company's home laundry equipment department.

Two automatic washers, companion pieces to the new dryers, also are in the newest home laundry automatic appliances which have been completely restyled for appearance and which incorporate a number of design improvements.

The washers and dryers feature functional controls mounted on 4-in. backsplashes, formed as a continuation of the one-piece work surfaces.

For most efficient, quick drying, it is recommended that the new dryers be operated on 220-volt, three-wire service. Should a user desire 110-volt operation, however, an authorized G-E agent can make a simple wiring change and install the machine with a two-wire cord set. The timer controls are calibrated to a full cycle of 140 minutes.

Two illuminated dials on the backsplash of the custom dryer, model DA-620, are color-coded to permit determination of settings at a glance, and an indicator light, centered between the two dials, glows red during operation. One dial determines the temperature setting; the second starts operation and determines the length of drying cycle.

The deluxe dryer, model DA-420,

has one non-illuminating rotary dial for controlling the length of drying time. Temperature settings are selected by a small switch on top of the backsplash panel.

Extra laundry pieces can be added to either dryer at any time. A safety switch shuts off the heating element and stops basket rotation when the dryer door is opened. The pre-selected drying time is not changed, however, regardless of how often the cycle is interrupted.

The custom dryer has an ozone lamp to give clothes a fresh outdoor aroma.

Matching Washers Shown

General Electric's new automatic washers match the dryers in such respects as height, exterior styling, durable baked enamel finish, illuminated color-coded control panel on the custom model, and non-illuminated control panel with one rotary dial on the deluxe model. The automatic washers have porcelain enamel cover and lid.

One color-coded dial on the custom washer, model WA-650, controls cycle operation, and the second, termed the "Fabri-Flex" sets the temperature of the wash water and turns the machine off and on. Possible settings of this dial include "off," "light," "hot," and "warm."

For washing action, the "Fabri-Flex" control must be set at "hot" or "warm," but regardless of this

setting, the rinse water is always warm. In the "lights" position, wash action is stopped, but the lights remain on to illuminate the control panel and the interior of the wash-basket.

The "Fabri-Flex" feature makes it possible to add forgotten pieces to the load, and permits long soaking of heavily soiled articles. Once stopped, the washer can be re-started at the exact moment of cycle interruption, or by adjustment of the cycle control dial, it can be made to repeat or skip any stage within the cycle.

Such flexibility of control makes it easy to set the minimum wash, rinse, and spin stages so essential to the proper washing of many of the new synthetic fabrics such as Orlon, Dacron, and nylon or combinations of these synthetics with wool or cotton.

A small load selector on the custom washer permits washing 5 lbs. of clothes in 10 gals. of water.

The deluxe washer, model WA-450, has but one non-illuminated rotary dial for controlling cycle operation. Hot or warm water temperature is set by a small switch on top of the backsplash.

Both new washers are equipped with a manual reset circuit breaker which automatically stops the washer in case of an electrical overload.

No Bolting Required

Like previous models, the washers are top-loading, free-standing, and operate on the agitator principle. Once started they will automatically wash, spray-rinse, deep-rinse under activation, spin-dry, and shut themselves off. They require no bolting down or reinforced floors. Full-load

capacity is 9 lbs. of dry clothes in 17 gals. of water.

Completing the 1953 line of home laundry equipment are a deluxe, medium-priced, and low-priced wringer washer and two ironers. The wringer washers have been restyled for appearance, and design improvements have been incorporated for efficiency.

New molded black plastic agitators are light-weight, easy to handle and clean, and will not corrode, pit, or discolor. The white baked-enamel finish on all models resists strong alkalis, and will not readily mar. All models are equipped with impeller-type drain pumps which will empty the machine in minimum time.

Safety Measure on Wringer

Special features of the deluxe model, WC-830, are a timer which controls the wash period up to 15 minutes and an "instinctive" wringer. When the wringer is in operation, any excessive push or pull on the clothes going through will stop the rolls.

A roll pressure release bar is conveniently located just above the rolls. The wringer rolls automatically adjust themselves to the thickness of the garment going through. Ten pounds of dry clothes may be laundered at one time.

Next in line is the WC-430. The wringer rolls automatically adjust themselves to the thickness of the garment to take out a maximum amount of water; pressure is instantly released by striking the release bar above the rolls. For convenience and ease of operation, the wash and drain controls are located close together at the front of the machine. The tub holds up to 8 lbs. of dry clothes at one time.

Designed for the popular-priced field, is the WC-230, which also will wash an 8-lb. load. The drain control is located at the back of the machine.

Models WC-430 and WC-230 are available without the drain pump at a reduction of \$10.

The ironer line is comprised of the AR-30 portable rotary ironer and the AF-20 pedal-controlled, automatic, flatplate ironer. In operating the latter, a slight downward pressure on the foot control brings the shot into ironing position and causes the ironing surface to exert a pressure of 400 lbs. against the fabric. The shoe surface measures 300 sq. in., or roughly the equivalent of 11 hand irons. In case of power failure, shoe pressure is released automatically.

The new washers are expected to reach the market some time during the second quarter of 1953.

Suggested Prices

Manufacturer's recommended national retail prices are:	
DA-620K Custom Dryer	\$249.95
DA-420K Deluxe Dryer	229.95
WA-650K Custom Automatic Washer	349.95
WA-450K Deluxe Automatic Washer	299.95
WC-830KP Deluxe Wringer Washer	169.95
WC-430KP Wringer Washer with drain pump	139.95
WC-430K Wringer Washer without drain pump	129.95
WC-230KP Wringer Washer with drain pump	119.95
WC-230K Wringer Washer without drain pump	109.95
AR-30 Portable Ironer	65.90
AF-20 Automatic Flatplate Ironer	279.95

Warde B. Stringham Elected V. Pres. of G-E To Succeed E. E. Potter

NEW YORK CITY — Warde B. Stringham, of Washington, D. C., has been elected a commercial vice president of the General Electric Co. by the board of directors. G-E President Ralph J. Cordiner has announced recently.

Assigned to Washington, D. C., Stringham will succeed Edwin E. Potter, Washington, D. C. vice president of the company, who is retiring after 43 years of service.

Well-known in Washington business and government circles, Potter has been a senior officer of General Electric since 1947. Stringham, executive assistant to Potter, was for 13 years Washington district manager for the General Electric Supply Corp., and was appointed a commercial vice president of that company in 1951.

He left the Supply Corp. last year to join Potter in the operation of the government business services group of General Electric.

Potter was elected a G-E vice president in 1947 and assigned to customer relations work, and in December, 1950 was assigned to Washington. Prior to that appointment he was a commercial vice president, having been elected to that post in March, 1945.

In that capacity he was a member of the staff of Charles E. Wilson, then G-E president, and responsible for coordinating customer relations of all departments and affiliated companies of General Electric in the District of Columbia.

Stringham joined General Electric in 1934 as president of Southern Appliances, a G-E subsidiary, and in 1936 became district manager of the General Electric Supply Corp. in New Orleans.

He came to Washington the following year as district manager for Gesco and established the Chesapeake district, which includes Baltimore, Washington, and Wilmington.

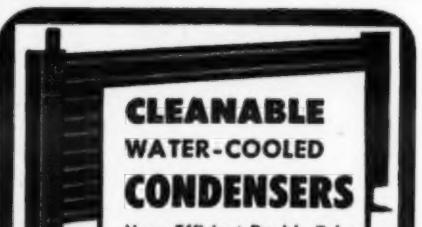
General Air Conditioning Opens New York Office

LOS ANGELES—General Air Conditioning Corp. here, manufacturer of sink-range-refrigerator combinations and other kitchen packages, announces the opening of a New York office.

Located in Suite 543, 11 W. 42nd St., New York City, the new regional office will be managed by Don Roberts. Roberts comes to the company after a long association with General Electric Corp. in engineering and sales.

W. H. Laband, president of General Air Conditioning, said the company's growing sales in the New York metropolitan area made a regional office necessary.

The company operates branches in San Francisco, Seattle, Chicago, and Tampa in addition to its Los Angeles factory.



and making more profit, too!

- A COMPLETE LINE—FILL EVERY NEED, SELL EVERY PROSPECT
- EXCLUSIVE MODELS THAT COMPETITION CAN'T TOUCH
- DEPENDABLE QUALITY—OVER 50 YEARS MANUFACTURING SKILL
- PROTECTED TERRITORY—100% FACTORY COOPERATION

This past year saw more dealers "go Fogel" than ever before because the Fogel line has "what it takes" to close more sales, make more profit. A complete line with exclusive models that meet the merchandising, refrigeration and space needs of the neighborhood store. Quality built, priced right, plus generous discounts that assure you extra profit—that's Fogel!

Get the Facts...Get the Profits

FOGEL
REFRIGERATOR COMPANY
5400-N EADOM ST., PHILADELPHIA 37, PA.
CABLE ADDRESS "FORECO" PHILA.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

29

30

31

32

33

34

35

36

37

38

39

40

41

42

43

44

45

46

47

48

49

50

51

52

53

54

55

56

57

58

59

60

61

62

63

64

65

66

67

68

69

70

71

72

73

74

75

76

77

78

79

80

81

82

83</

Ft. Worth Assn. Plan Sees 'Year-Round Conditioning At No Extra Cost'

FORT WORTH, Texas—A new and aggressive advertising and merchandising campaign instituted by the Fort Worth Air Conditioning Association has aroused much interest among air conditioning associations, equipment manufacturers, and home builders associations, according to W. I. Spitzer, chairman of the educational and advertising committee of the association.

The theme of the program is centered around "year-round air conditioning at no extra cost" made possible through a plan of savings in construction. In all advertising to both the consumer market and allied trades these savings are listed and the savings estimated.

The really remarkable phase of the program is that the savings actually exceed the cost of equipment and installation thereby making possible the construction of an air conditioned home at a lower cost than a conventionally designed home of the same size.

The campaign points out that there is no loss in quality, materials or workmanship, but that the savings are made possible by eliminating the things made unnecessary by the air conditioning itself.

Substantial savings are realized with better window planning, since all windows are used as a source of light or to provide a view. There's no need to worry about cross ventilation and having movable sashes on all windows.

Smaller, more scenic locations, ordinarily considered less desirable by a conventional planner because of poor wind or sun angles provide another source of saving. The use of a rectangular floor plan with expensive outside wall areas and offsets at a minimum can cut building costs up to \$750 according to the results of research compiled by the association.

Other savings are made through such items as elimination of the fireplace, breezeway, space heaters, floor furnaces, and the attic fan.

Prices quoted in the campaign were based on homes in the \$12,500 price range and included the latest in contemporary styling and building practices. According to the figures compiled by the association a total savings of \$3,925 could be realized by specialized planning. All cost figures used throughout the campaign were based on current building prices in the Fort Worth area.

The entire membership of the Fort Worth Air Conditioning Assn. voted to undertake the campaign as a joint effort and funds were raised by a special assessment of association members. All advertisements were given the association endorsement and carried the names of individual association members.

The entire campaign included more than 9,000 lines of newspaper and magazine advertising along with more than 100 radio spots. All in all the message was directed to Fort Worth homes with a potential of more than four million.

The complete program was developed by W. I. Spitzer, president of Air Accessories, Inc., and John H. Ericson, account executive of Parker Willson Advertising, both of Fort Worth. It has been copyrighted by Parker Willson Advertising and is available as a packaged presentation for air conditioning groups throughout the country.

Koether Joins Viking as Western Representative

CLEVELAND — Frank Gibbons, sales manager of the Viking Air Conditioning Corp. here recently announced the appointment of Herb Koether as a manufacturer's representative.

Koether will carry the Viking portfolio throughout the west covering seven states to present the air movement and air cooling products that Viking manufactures.

Koether comes to Viking after serving as a sales manager with the Crosley Div., Avco Mfg. Corp. He has had 18 years experience in home appliance sales, starting with the Frigidaire Div., General Motors Corp. in 1934. Koether was formerly mid-west divisional sales manager for the Apex Electric Mfg. Co.

If you are tired of trying
to make a year's living
in six hot weeks...



Here's what you've been waiting for...

If you are like us, you know a lot of good men in the air conditioning industry who are just plain fed up with this business of waiting for the weather to sell air conditioning—and then half-killing themselves trying to fill all the orders, make all the installations, and take care of all the emergency service calls at the same time.

It just doesn't seem right, somehow, to try to crowd a year's business...and squeeze out a year's living...during the six hottest weeks of the year.

You don't like it. We don't like it. Even the customers don't like it.

General Electric is doing something about it. We've had a lot of hard-headed business-minded people working on the problem, and we think we have an answer that will appeal to you.

The new G-E selling program for packaged air conditioners for 1953 is a honey.

• The special G-E customer incentive plan for 1953 gives you the means to sell early-season—and spread out your sales and installation load.

• The G-E planned financing we have for G-E dealers does everything for you but bank your profit—and it makes it mighty easy for you to do that for yourself!

• The new 1953 G-E product is terrific! Wait till you see it—you'll want to be selling with it—not against it.

• The national advertising and the local promotion programs that work for you as a G-E dealer are the best in our history—and we think you'll agree that they give you a lot of leverage on stubborn, wait-a-bit prospects.

• The G-E name will work harder than ever for you this year—because every year it grows in prestige and public acclaim. You can't put a better name with yours to help you build your own position in your community.

So—if you are a qualified refrigeration or air conditioning dealer and you want to stretch your profit season—don't waste another minute. Call, wire, or write and ask us about opportunities with G. E. in your area. General Electric Company, Air Conditioning Division, Commercial Products Department, Bloomfield, New Jersey.

GENERAL  ELECTRIC

• General Electric Company, Section ACR-1,
Air Conditioning Division, Bloomfield, New Jersey
Please tell me more about my business opportunities for leadership
with G-E Air Conditioning.

NAME.....

COMPANY.....

ADDRESS.....

CITY..... ZONE..... STATE.....

How To Make a Profit

Lafferty Clarifies Difference Between Gross Profit and Mark-Up on Cost, Explains How Gross Profit Does Not Always Include a Net Profit

MIAMI, Fla.—Is a profit justified? R. S. Lafferty, vice president of the Hill-York Corp. here, had only one answer to that.

"A proprietorship or corporation doing business and not making a profit is like a sore or a boil in the economy of our country. It should not and need not continue. Particularly in our industry something will have to be done to help this situation."

Addressing the business administration conference sponsored jointly by the Refrigeration and Air Conditioning Contractors Association, Refrigeration Service Engineers Society, and the Refrigeration Equipment Manufacturers Association as part of the eleventh all-industry educational exhibit and conference, Lafferty declared:

"A new profit is the only excuse for an individual or a company to be in business. A profit is really not a living for somebody, nor is it a percentage of sales, nor is it a percentage of capital employed.

"A profit is rather a sum of money over and above the proprietor's ability to earn with others. It must be sufficiently large enough to justify the money invested, the risk involved, and the employment of others.

"If any business does not operate at a profit, its employees cannot benefit by opportunities in the future, it cannot expand, it cannot employ

more personnel, and it prevents other companies from making a profit who will in a good businesslike manner be worth their part in our national economy and in our industry.

"In discussing how to make a profit, I would like to first clarify one very misunderstanding and improperly applied mathematical formula relative to the difference between the mark-up cost and the gross profit on the sales dollar.

"All merchandisers, all retail businesses, have systems and methods that have been developed and promoted to help them realize the facts of business life.

"National Cash Register has spent thousands and thousands of dollars to educate retailers relative to good business practices and to look upon merchandising of all types from the standpoint that expenses are a percentage to the sales dollars not a mark-up on cost.

"Serious differences arise as shown by the following table:

Relationship Between Gross Profit And Mark-Up

Gr. Pr. % of Sale	Mark-Up % of Cost
1.0	1.0
10.0	11.0
20.0	25.0
30.0	42.9
33.3	50.0
40.0	66.7
50.0	100.0

"For instance, you can see by the above table that 11.1% mark-up on cost is only 10% gross profit, whereas, 50% mark-up on cost is only 33 1/3% margin on the sales dollar, and 100% mark-up is 50% profit on the sale.

"Many of us have had a habit of thinking that gross profit meant a potential net profit. It does not and never will unless we can make more margin of gross profit on the sales dollar than our expenses are when they are apportioned to the sales dollar.

"Most accounting allocations or apportionments, and in fact expenses including taxes and workmen's compensation, are more nearly and more properly apportioned to the sale than they are to any other one factor of our business.

Overhead Is Big Factor To Any Size Firm

"We find after many investigations and a thorough review of Dun and Bradstreet reports available to all of us that the large business has just as large an expense or overhead factor to the sales dollar as the small fellow.

"There are two schools of thought—some think that the individual in a small business can operate more reasonably and vice versa. The facts remain, however, that the more business any company does, the more

expenses increase, and it stays awfully close to being in exact proportion to the sales dollar.

"The small operator on the other hand may be slightly more efficient with less indirect expenses but yet his own properly allocated living expenses, whether he takes it in the form of a salary or whether he just wants it charged to the business on a yearly basis, makes his overhead just as large if not larger than an enterprise doing four or five times as much business.

"Please look at the sample operating statements attached. The first column represents the air conditioning and refrigeration industry. It is an average of profitable operations of many people all doing over \$100,000 worth of business yearly prepared by Dun and Bradstreet over a period of over four years.

"The second column adjoining for comparison sake is the same expenses averaged for many businesses sending in reports to Dun and Bradstreet doing \$50,000 worth of business or less.

Small Firms Earn Larger Net

"Please note that the larger businesses make a net profit of 3.4% of sales and the smaller business 4.6% of sales, yet the small enterprise has slightly increased overhead in proportion to the sales dollar than the larger business but has worked on a little higher margin of gross mark-up, and it may be due either to efficiency in handling of the work executed, the higher percentage of service business at a profitable mark-up, or to a little higher efficiency in his operations.

"Now all that it takes to make a profit is to have a higher margin of profit on the sale than your expenses are in proportion to the sale. You can make more profit by raising the mark-up and lowering expenses.

"It is as simple as that and yet many, many violations of this fundamental law of mathematics or ac-

counting or good business practice is in evidence particularly in our industry.

What Prevents A Profit?

"Now, the third important and interesting problem is what is preventing our present profit. Many of our fellow businessmen have gone out of the air conditioning and refrigeration field either due to being bankrupt or not making money even though they still have some left.

"They have not received enough margin of profit to stay in business or to make it interesting enough to them to want to stay in business.

"It is very difficult to operate without having total sales expenses somewhere around 10%, including advertising and commissions. And it is very difficult not to have operating management salaries, some office salaries, rent, and if you do operate without having provisions for bad debts, sometime things are going to catch up with you, and your business is in danger of failing.

"Without proper insurance you should not be in the air conditioning and refrigeration field and certainly taxes and many other government costs are actual facts, not theoretical, and should in your own mind be apportioned to the sales dollar.

"Please note that it takes 40.8% average mark-up on cost to make a gross profit of 29% on the sales dollar. Also note that it took 50.4% mark-up on cost with a small business enterprise to make 33.5% profit on the sales dollar.

"Now, fellows, when we take expenses in the one case of the larger enterprise of 25.6% and that of the smaller business of 28.9% please check with me in realizing that no money can be made in our industry at mark-ups of 25% or 33 1/3%.

"The gross profit to the sales dollar will be so small that the business will have a net operating loss. If we omit some necessary expenses

(Concluded on next page)

SAMPLE AVERAGE OPERATING PERCENTAGES FOR LARGE AND SMALL AIR CONDITIONING AND REFRIGERATION ENTERPRISES

	Over \$100,000 In Sales	Under \$50,000 In Sales
Sales	100%	100%
Cost of Sales	71.0	66.5
Gross Profit	29.0	33.5
Operating Expenses	25.6	28.9
Net Profit Before Income Tax	3.4	4.6
Expenses		
Sales Commissions	7.2	4.1
Traveling & Auto	1.7	3.8
Advertising	.7	.5
All Other Selling Expenses	1.0	10.6
Management Salaries	4.2	11.0
Clerical Salaries	2.1	1.8
Rent & Building Expense	1.5	2.4
Bad Debts	.4	.4
Insurance, Taxes & all other expenses	3.7	11.9
Shop Expenses	3.1	3.1
Total Expense	25.6	28.9
Realized Mark-Up on Cost	40.8	50.4

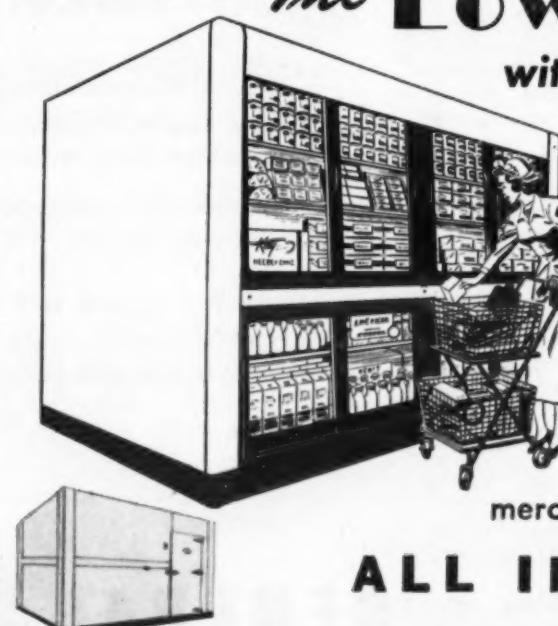
Here's The Lowboy®

with SLIDING-DOOR FRONT •

a bulk-storage walk-in cooler and self-service merchandising unit

ALL IN ONE!

DEALERS: Write for information about our dealer franchise... a profitable representation for wide-awake dealers who can handle the full WARREN LINE. Address Dept. 509.



The LOWBOY

REFRIGERATORS
POST OFFICE BOX 1436
ATLANTA 1, GEORGIA



ACME INDUSTRIES, INC., JACKSON, MICHIGAN, U.S.A.
Refrigeration and Air Conditioning Division

CONTINUOUSLY SERVING THE AIR CONDITIONING AND REFRIGERATION INDUSTRY SINCE 1919

Free Consultation with ACME Engineers is yours for the asking.
Write ACME INDUSTRIES, INC., Dept. A C, Jackson, Michigan

How To Make a Profit--

(Concluded from preceding page) that should be incurred for our business's future including such things as advertising, insurance, and provisions for bad debts, no economic benefits to yourself as owners will result.

"If any of you who are not in a management position to the company for whom you work want to really get ahead you should take interest with your owner in the making of a profit.

"You cannot as individuals nor can any union man as a productive worker for a company advance in your field without being selfishly interested in your employer making a profit. He is not worth working for, frankly, if he doesn't have sufficient business ability to get the facts and then to act to get the results to make a profit.

"Again I repeat, all that it takes to make a profit is a high enough margin of gross profit to be greater than the expenses on a percentage basis compared to the volume of business done, or in other words, the sales dollar.

"If any of us, and we all do, take jobs with a low margin, other installations and other orders must be received with a higher margin so that our average will come out in accordance with or superior to the operating statements illustrated.

"Too many of us just try to see how low we can get our expenses; we operate inefficiently, work harder and harder to sell at lower and lower prices. It is amazing how many things we do to see how cheap we can sell our merchandise or our contracts.

"We should be concerned with what is the minimum price at which we can profitably sell our merchandise and our services and be quite willing to turn down orders and business where the buyers seem to be in control.

"Now, the fourth and last step—what we should all do about it.

"We do have several choices. We can cut expenses to the bone and work for a very small sum of money and either eventually get out of business or continue on just making a bare living.

"But really, fellows, anyone in either a small or a large business should have absolutely no right to plan his future this way. He should

make a good wage if he is able to either sell, design, or install this equipment working for someone else.

"The real answer is to study the accounting or profit phase of the figures herewith presented, get any other information about our own operation and others and make comparisons.

"We should budget our expenses to the sales dollar at the start of any fiscal period and follow that budget making comparisons and selling with sufficient mark-up so that this budgeted net profit will actually and in truth result.

"Many of us realizing the problems of being in this business have various talents. Some are good at selling air conditioning and refrigeration; some are good at designing and engineering; some are good at servicing.

"But we should all take first these accounting facts to heart, discarding temporarily our other talents, only putting them to work in a budgeting manner to follow a known pre-conceived plan. We should turn down business offered where the mathematics doesn't fit into the scheme of our known knowledge of what it takes to make a net profit."

2 Refrigerators Indicate Poultry Health Section

SHREVEPORT, La.—Two large electric refrigerators call attention to the animal and poultry health department of the Green Wall Drug Store here, according to Owner L. J. Bau-

man. The refrigerators hold part of the store's extensive stock of biologicals, serums, and vaccines. Standing at either side of the front area, the veterinary supplies section may be seen from almost all points within the store.

The animal and poultry health department is further promoted through regular mailings of informative literature, accompanied by circulars stressing the department's large inventory.

The store also holds sales meetings for clerks in order that they may receive factual information from manufacturer's representatives whose lines are stocked.



Large Ad, TV Show

Herald Mitchell Room

Cooler In Dallas

DALLAS—A two-third page advertisement in the *Dallas Morning News* heralded the first public showing of the 1953 line of Mitchell room air conditioners during the company's distributor sales meeting held recently at the Adolphus hotel here.

Response to the showing was "tremendous," according to Mitchell spokesman who explained that builders, hotel and motel operators, and other purchasers of multiple units ordered a sizeable volume of the 1953 units "on the spot."

In addition to the newspaper ad, which featured as a door prize a new Mitchell $\frac{1}{4}$ -hp. room air conditioner, the public was informed of the showing through a morning TV show sponsored by Mitchell distributors.

E. A. Tracey, vice president in charge of Mitchell's air conditioning division, was interviewed on the program and described the features of the 1953 Mitchell units including a new heating element called "Dyna-Heat," which makes the unit capable of cooling and heating.

Meetings are being held through-

out the country to introduce Mitchell distributors to Dyna-Heat and other features of the 1953 line of Mitchell air conditioners, as well as the company's new lines of products.



Vinylite Cover Fits All Window Cooler Models

NEW YORK CITY—A cover made to fit all models of window type air conditioning units both old and new up to $\frac{3}{4}$ ton is being manufactured by All-Weather Products Co. here.

The cover is made of a durable, "flame-proof," gray vinylite and is reinforced with a wire frame for snug fit. In addition, it has a typing device which gives it a close fit on all sides of the unit.

According to the manufacturer, the cover can be installed from inside the room. Retail price is \$6.95.



New Leonard Unit

LEONARD'S NEW ROOM AIR CONDITIONER projects only $9\frac{1}{2}$ in. into the room and can be installed in any double hung window from 27 to 48 in. in opening width. A $\frac{1}{4}$ -hp. sealed unit, it has a rating of 8,800 B.T.U. on hour and moisture removal capacity of $2\frac{1}{2}$ pints on hour. Tan-and-brown finish is designed to blend with any interior decorative scheme.



Stocked and Sold by Leading Jobbers

VALVES • DRIERS • STRAINERS • CONTROL DEVICES and ACCESSORIES FOR REFRIGERATION and AIR CONDITIONING and INDUSTRIAL APPLICATIONS

HENRY VALVE COMPANY

MELROSE PARK, ILLINOIS Chicago Suburb

Cable: HEVALCO, MELROSE PARK, ILLINOIS

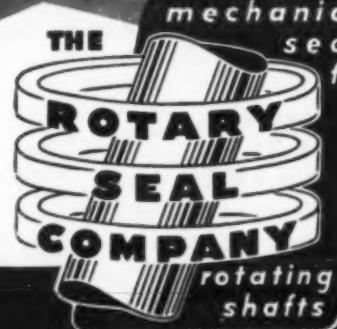
ROTARY SEAL Replacement Units

AT ALL LEADING JOBBERS

Easy to Install
Efficient in Operation
Simple in Construction
Economical

For Commercial, Semi-Commercial, Air Conditioning, and Household Refrigerator Compressors... over 20 years of performance proof... Units available for all standard makes.

AVAILABLE FOR MORE THAN 900 COMPRESSOR MODELS



"Seal with

Certainty!"

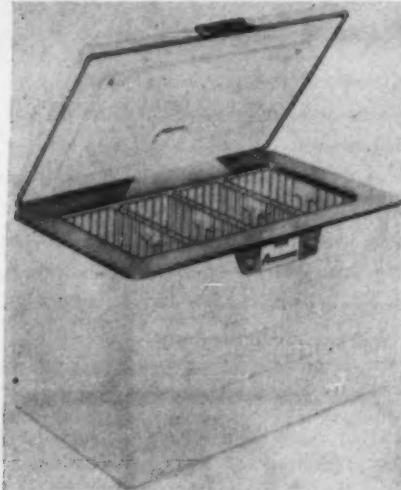
2020 NORTH LARRABEE STREET
CHICAGO 14, ILLINOIS, U.S.A.
CANADIAN AGENT: 2025 ADDINGTON AVENUE
MONTREAL 28, QUEBEC, CANADA

What Was New

At the Winter Marts

When requesting further information on new products, please use "Information Center" form on "What's New" page.

Amana Adds 14-Cu. Ft. Chest-Type Freezer to Line



KEY NO. C-125

A 14-cu. ft. chest freezer carrying a suggested retail price of \$399.50 has been placed in production by Amana Refrigeration, Inc., it was announced recently by George C. Foerstner, executive vice president of the company.

Called model 140, it is the second chest freezer to be made by this firm, which has long been a principal factor in the design and manufacture of

upright freezers. Its companion model, an 8-cu. ft. chest freezer, has been sold out at factory level since it went into production last July, Foerstner said.

Model 140 can hold 490 lbs. of frozen food. It is 36 in. high, 56 in. wide, and 30 in. deep.

The unit has the standard Amana "Powerpact" hermetically-sealed freezing unit.

The freezer's side walls are all contact freezing surfaces, which make possible quick freezing and low temperature storage. Tubing is fastened to liners to insure good conductivity. Insulation is low temperature fiber glass which is hand packed and sealed against moisture. The 140 is finished in white baked-on enamel applied on Bonderized surfaces.

Other features include a full top lid, removable baskets, a built-in lock, a mercury-switch light that goes on automatically when the lid is open, a temperature indicator, and tamper-proof temperature control on front of the cabinet.

The model comes with a five-year food protection plan, a five-year warranty on the sealed-in refrigeration system, and a one-year warranty on the cabinet.



THIS NEW FRIGIDAIRE FILTRA-MATIC clothes dryer will operate on a 120-volt 20 amp. conventional appliance circuit and will not require 230-volt wiring. It has the same Filtra-matic operation as Frigidaire's 230-volt model, requiring no outside vents or plumbing. Lint and moisture are removed by the Filtrator, installed near the bottom of the cabinet.

'Filtra-matic' Dryer Operates on Low Voltage

KEY NO. C-126

A low voltage plug-in version of Frigidaire's "Filtra-matic" electric clothes dryer, which requires no outside vents, is announced by Frigidaire Div. of General Motors.

The new Filtra-matic electric dryer will operate on a conventional

120-volt 20-ampere appliance circuit, and will not require the additional expense of 230-volt wiring, the company said.

"Because the new model requires no outside vents or plumbing and can be plugged into a conventional 20-amp. electric appliance outlet, it provides increased flexibility of installation," Frigidaire stated. "For all practical purposes this new dryer can be installed quickly and easily in many locations in the household and it can be moved about as required."

Like Frigidaire's 230-volt Filtra-matic dryer, this new model is said to solve the problem of lint and moisture in the air coming from the dryer, "eliminating hot, humid room atmosphere, steamy windows, and condensation on the walls and furnishings." It is styled to serve as a companion

piece to the Frigidaire automatic electric clothes washer.

One of the outstanding features of the new Filtra-matic electric dryers is a new and exclusive "Filtrator" in the bottom of the cabinet.

"Fresh room air continually flows over the Filtrator's condenser-like tubes keeping them cooler than the air coming from the revolving clothes drum," Frigidaire explained. As lint-laden, moist air passes through the Filtrator tubes, lint is trapped as the moisture condenses. This moisture drains into a rustproof porcelain tray.

"A connection is provided so that a flexible tube can carry the collected water to a floor drain, if there is one nearby. Or, the water can be emptied by simply removing the tray."

Styled in white and chromium, the new dryer has a one-piece top and back panel. The cabinet and revolving clothes drum are finished with Frigidaire "Lifetime" porcelain. The back panel contains the timing and heat controls. The "Dry-O-Matic" timer can be set to shut off the dryer automatically when the clothes are dry.

A switch next to the timer operates the interior light, and a signal light on the panel glows when the dryer is operating or when interior light is on. A variable heat control is located on the left side of the back panel and is marked for medium, high, and low drying temperatures, as well as for fabric classifications to eliminate guesswork in determining proper temperature settings.

The door and loading port are designed so that a clothes basket can be placed directly below. The door swings open a full 180° to permit loading or unloading from either side. The loading port has smooth rounded corners finished in porcelain to prevent snagging or catching clothes.

The revolving drum permits clothes to tumble about freely while the drying operation is in progress, according to the manufacturer. Frigidaire "Radiantube" sealed heating units are used.

An ozone lamp in the drum helps keep the clothes "sunshine fresh." Thick glass wool insulation is provided on all sides.

Over-all dimensions of the new model are: width, 30 in.; depth, 26 1/4 in.; height at back, 41 in.; and height of table-top surface, 36 in.

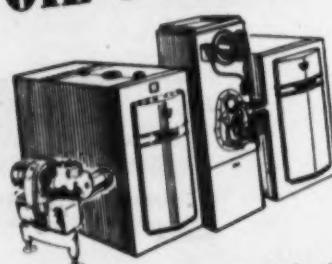
Turn a Bright New Leaf in Your Sales Ledger

NEW PRODUCTS... YEAR 'ROUND PROFITS

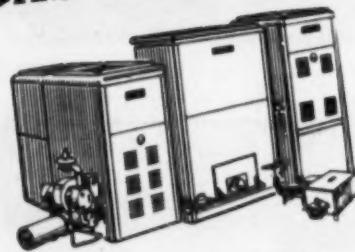
backed by thirty years' sales success
in home comfort!

3 FULL LINES... 1 FAMOUS NAME...
4 SEASON AUTOMATIC HOME COMFORT

Williams
EUREKA OIL-O-MATIC • GAS-O-MATIC • AIR-O-MATIC



Factory integrated oil heating equipment for every size home, every type of heating system. Boiler • Burner Units, Winter Air Conditioners, Conversion Burners.



Precision engineered, AGA approved gas heating equipment for large and small homes. Winter Air Conditioners, Gravity Furnaces, and Conversion Burners.

Newest member of a famous family. Efficient, economical, low cost Summer Air Conditioning Units for homes large and small. 2 and 3 ton capacities.

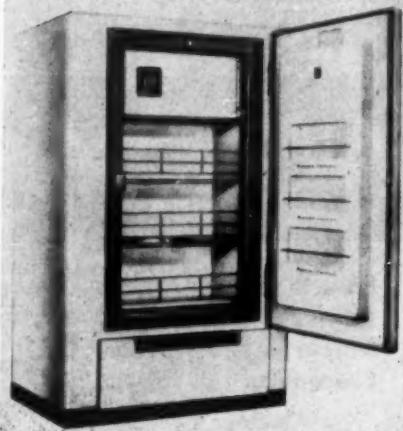
DON'T MISS
Space 2-430 thru 2-436
OIL-O-MATIC EXHIBIT
International Heating
and Ventilating Exposition
Chicago, Illinois Jan. 26-30

Write today for
franchise information

WILLIAMS OIL-O-MATIC DIVISION
Eureka Williams
CORPORATION
Bloomington, Illinois
Better Products. Better Made... for better living!



Wilson Restyles Freezers To Include Color Trim



KEY NO. C-127-A

Wilson Refrigeration, Inc. announces two new lines of completely restyled, self-contained home freezers for 1953.

The first is a new line of color-styled upright "reach-in" freezers. They provide three sizes (15, 20, and 25 cu. ft.), and feature a color combination of white, with blue and gold trim and a black base. The blue and gold exterior color scheme is carried over into the inside of the freezer, according to the company.

Specific features of the new Wilson upright freezers include: contact freezing on every shelf, in addition to a special high-speed freezing section that has its own inner door; frozen juice pockets counter-sunk in the door; package-retainer grids on every open shelf; automatic warning light;



KEY NO. C-127-B

pull-out "handi-bin" for wrapping materials; and an easy-to-reach temperature control.

The second of the new lines of Wilson home freezers is a line of chests. Here, too, the line includes three models (15, 19, 24 cu. ft.) and features the distinctive new blue and gold Wilson trim inside and out.

Special storage is provided for frozen juices in a new gold-colored tray. Other features of the new Wilson freezer chests include:

Compartmented storage sections (top section is divided by sliding baskets; bottom section by rust-resistant dividers); wrap-around freezing walls; separate high-speed freezing section; interior flood light; automatic warning signal; and temperature control.

Both of the new lines of Wilson freezers were previewed at the Furniture Mart in Chicago beginning Jan. 5.

A REAL PROFIT MAKER...

Add germ control to heating and air conditioning sales.

Glycolator ----- reduces air-borne bacteria and viruses, thus reducing colds and other respiratory diseases.

FURNACE MODEL
Mounts easily on forced air stack. Low cost; thermostatically controlled. Treats up to 30,000 cu. ft. of air per hour.

LARGE CAPACITY, COMMERCIAL MODELS AVAILABLE.
For complete information, prices and available dealer or distributor territories, write:

Glycolator Valencia, Pa.

Dept. A-5

What Was New at the Marts



'Rotiss-A-Range' Shown By Odin Stove Co.

KEY NO. C-128

Being introduced at the Furniture Show by Odin Stove Co. is its "Rotiss-A-Range," a combination featuring an all-electric barbecue and a gas-fired oven and top burners which have been included in a single unit.

The range will retail for approximately \$290.50, "allowing a sufficient margin for trade-in," the company said.

The rotisserie or barbecue part of the range requires no special wiring or installation service. It operates on any 110-volt outlet, with just one cord serving the entire range.

Meat broils under infrared electric heat. It has a motor-driven spit, which when removed turns the barbecue into an electric broiler with six different broiling positions. It may also be used for open pan roasting of meats.

Interior is chrome-lined to reflect and intensify heat, has splash guard, drip tray, grill, and handle, and is fully insulated.

The gas-fired portion of the range has automatic oven heat control, clock and timer, fluorescent light, and chrome-lined oven with glass in oven door.

White porcelain over-all exterior finish is another feature.

The rotisserie is also available in Odin's electric "Beautyrange," the company points out.



Jordon Upright Freezer Simplifies Storage

KEY NO. C-129

New and "unique" features in an upright home freezer, designed to simplify storage and to assure top freezer efficiency, have been incorporated by Jordon Sales Co. in two 1953 models, the company announced.

One new feature is a "Juice Bar" on the top shelf.

"The top shelf has been cut back and lowered so that frozen juice concentrate cans and small, irregularly shaped packages become easily accessible," the company said. "At the same time, each can or package is kept in direct contact with sharp freezing surfaces."

Another new feature is the "Seal-O-Matic" door, a special Jordon development in which the door adjusts itself to compensate for any misalignment that might occur.

"With this new Jordon self-compensating principle, all one needs to do to perfectly re-align the door is to slam it shut," it was explained. "This is designed to eliminate many service calls and to maintain top sharp freezing efficiency."

The two Jordon upright freezer models are the "Hostess" (UF-14) and the "Twenty" (UF-20).

Each shelf of the Jordon freezers is equipped with "super-fast" freezer coils so that practically all the stored

food is in direct contact with freezer plates.

The freezers are of all welded steel construction and extra thick non-settling Fiberglas insulation is used. Wider breaker strips in door are said to keep cold from seeping in, and extra heavy gaskets provide a "perfect door seal."

Each freezer has auto-body enamel finish on high-baked Bonderized steel. The interior is made with polished aluminum.

The sealed compressor is placed on Jordon slide-out tracks for easy servicing and inspection.

The UF-14 model is 68 in. high, 34 in. wide, and 29 in. deep with door and hardware. Shelves, top to bottom, are Juice Bar 4 1/2 in., 8 1/4 in., 9 1/4 in., and 14 in.

The UF-20 model stands 72 1/4 in. high, 40 in. wide with a depth of 31 in. with door and hardware. Shelves, top to bottom, are Juice Bar 4 1/2 in., 9 1/4 in., 10 1/4 in., 10 1/4 in., 15 1/2 in.

Hotpoint Freezer Stores Up to 400 Lbs. at 0°

KEY NO. C-1210

A new 11.2-cu. ft. upright freezer that will store up to 400 lbs. of frozen foods at zero temperatures has been introduced by Hotpoint Co. as an addition to the company's 1953 line of 8, 15, and 23-cu. ft. chest type freezers.

The new unit has open refrigerated shelves for maximum air circulation and will freeze up to 35 lbs. of food every 24 hours.

Although over-all height is only 62 in., the unit has over 15 sq. ft. of usable shelf area. The two top shelves in the new freezer are designed for fast freezing. An adjustable temperature control that automatically maintains a constant 0° F. can be set by the user for lower temperatures if faster freezing is desired.

A 1/4-hp. hermetically-sealed cooling system carries refrigerant to four different freezing surfaces during operation, assuring correct temperature maintenance at all shelf levels.

All 1953 Hotpoint freezers have completely sealed cooling systems and



SLIDING BASKET is one of the features of the new Hotpoint 11.2-cu. ft. upright freezer.

are designed to prevent outside "sweating" under normal conditions.

According to John F. McDaniel,

On these two pages are presented some new products shown at the Winter Furniture Market in Chicago. More stories on products will appear in the next issue. When requesting further information on any of these items please use the "Information Center" coupon on page 18. Key Numbers appear at the opening of each article.

vice president, marketing, the new upright unit (model EM 112-7) is being added to Hotpoint's line of kitchen and laundry appliances to meet freezer needs of families living in apartments and basementless homes. The new Hotpoint unit will store 400 lbs. of frozen foods in the same floor space required by a 9-cu. ft. refrigerator, he said.

Additional convenience features on the new model include a 5-position center sliding shelf and two lower sliding baskets suspended on nylon rollers. Each basket holds up to 22 lbs. of frozen foods.



ANSUL REFRIGERATION OILS HAVE BEEN MACHINE TESTED FOR 4500 CONSECUTIVE HOURS UNDER ACTUAL OPERATING CONDITIONS. IN ADDITION FIELD EXPERIENCE WITH ANSUL NON-FOAMING OIL IN ORIGINAL EQUIPMENT HAS BEEN EXCELLENT.

NOW... MORE THAN EVER...
THE FINEST REFRIGERATION OIL
...at any price!



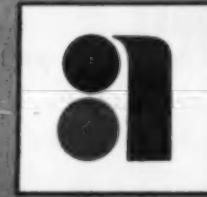
ANSUL NON-FOAMING REFRIGERATION OIL

NOW... MORE THAN EVER... ANSUL is the FINEST REFRIGERATION OIL at any price! In addition to the features which have made it outstanding in the past... High Lubricity, High Stability, Low Moisture and Low Wax... a vital improvement has been made. ANSUL OIL IS NOW PROCESSED TO PROVIDE NON-FOAMING CHARACTERISTICS... a distinct advancement in the science of refrigeration lubrication.

ANSUL is the LARGEST SELLING REFRIGERATION OIL sold through Refrigeration Wholesalers... EXCLUSIVELY.



Write for more complete information on ANSUL NON-FOAMING REFRIGERATION OIL. ANSUL Technical Bulletins are also available to Refrigeration Service Engineers through Ansul Wholesalers who welcome every opportunity to serve the men of the industry.



ANSUL
Chemical Company

REFRIGERATION DIVISION • MARINETTE, WISCONSIN

MANUFACTURERS OF REFRIGERANTS AND REFRIGERATION PRODUCTS, INDUSTRIAL CHEMICALS, SPECIAL CHEMICALS AND DRY CHEMICAL FIRE EXTINGUISHERS - DISTRIBUTORS OF DU PONT "FREON" REFRIGERANTS

They'll Do It Every Time . . . By Jimmy Hatlo

FETLOCK WAS SO FED UP HE QUIT HIS CONFINING OFFICE JOB FOR A MAN'S LIFE ON THE BOUNDING MAIN....

ACT 2. YOU GUessed IT--HE'S 3RD ASSISTANT PURSER, FOUR DECKS BELOW WATER LINE ON THE S.S. DEEPITCH....



Have You READ 'Peace and Progress' Yet?

IT'S FACTS MR. DEALER THAT SELL ROOM AIR CONDITIONERS TODAY!



Available in 1/2, 1/3, 1/4 and 1 H.P. Capacities

It's a fact!
ONLY MITCHELL
both Cool and Heat
with the Weather-Dial!

It's a fact!
ONLY MITCHELL
has the Weather-Dial!

It's a fact!
ONLY MITCHELL
*has the double capillary tube
REFRIGERANT SYSTEM*

It's a fact!
ONLY MITCHELL
has all this plus

NIGHT-COOL: Moderate cooling for just warm days and nights . . . **ARID-DRYER:** Converts unit to a powerful dehumidifier for humid, muggy days . . . **COOL AND EXHAUST:** Converts unit to giant exhaust fan while cooling room at the same time . . . **SOUND MUFFLER:** Permits lowest operating sound level of any unit on the market . . . **FILTERS:** Removes 99% of dirt, dust and pollen from air . . . **VENTILATES:** Brings fresh air into room in any season . . . Dyna-cooled in summer or Dyna-hot in winter . . .

MITCHELL MFG. CO., DEPT. AC-8
2325 Clybourn Avenue, Chicago 14, Illinois
Gentlemen: Rush me full details on how I may become franchised to sell the new Mitchell Room Air Conditioner . . . Tell me more about how you Weather-Dial COOL for matchless summer comfort and HEAT for extra winter warmth.

Name _____
Store Name _____
Address _____
City _____ Zone _____ State _____

AND ONLY MITCHELL can put
FACTS in the hands
of your customers at the
point of sale!

AN INTERNATIONAL INSTITUTION • SUBSCRIBERS ALL OVER THE WORLD

Trade Mark
registered
U. S. Patent
Office:
Est. 1926



F. M. COCKRELL, Founder

Published Every Monday by BUSINESS NEWS PUBLISHING CO.
450 W. Fort St., Detroit 26, Mich. Telephone Woodward 2-0924.
New York office: 521 Fifth Ave., Telephone Murray Hill 7-7158.
Chicago office: 134 S. LaSalle St., Telephone Franklin 2-8093.

Subscription Rates: U. S. and Possessions, Canada, and all countries in the Pan-American Postal Union: \$5.00 per year; 2 years \$8.00. All other foreign countries: \$7.00 per year. Single copy price, 20 cents. Ten or more copies, 15 cents each; 50 or more copies, 10 cents each. Please send remittance with order.

GEORGE F. TAUBENECK
Editor and Publisher

PHIL B. REDEKER, Editorial Director

C. DALE MERICLE, Associate Editor

JOHN SWEET, Assistant Editor
HUGH MAHAR, Assistant Editor
GEORGE HANNING, Assistant Editor
MARGARET DEAN, Assistant Editor
Editorial Assistants: BERNICE SHEPLOW, BARBARA MIRIANI, AND LENORE E. SMITH

E. L. HENDERSON, General Manager
ROBERT M. PRICE, Adv. Mgr.
ALLEN SCHILDHAMMER, Western
Adv. Mgr.
ALICE M. BARROW, Adv. Secy.
WALTER J. SCHULER, Production Mgr.
GEORGE CASEY, Circulation Manager

Member, Audit Bureau of Circulations. Member, Associated Business Papers.

VOLUME 68, NO. 2, SERIAL NO. 1,243, JANUARY 12, 1953

"I have always felt that whatever the Divine Providence permitted to occur I was not too proud to report. The people are not served by pussyfooting, or by that sort of journalism in which nobody will ask who is the editor of a paper or the writer of an article, and nobody will care."—Charles A. Dana.

Advice to Salesmen: Don't Be a Cry-Baby

EASIEST thing in the world for some salesmen to do is agree that a product or policy they represent needs improving. A few even will admit on occasion that the home office is staffed with dolts and imbeciles—with possibly one or two bright people who probably just don't understand them and their special problems.

However, unless the men who produce a product are sold along with it to customers, the latter will either (1) lose respect for the salesman, or (2) be transient (rapid-turnover) customers because they don't trust the "house."

In the rare case that a good salesman truly isn't appreciated by his bosses, usually he can get a better job with another firm. How? By presenting evidence that he knows how to build profitable repeat business. This knowledge—and these customers—comprise his "capital."

No one-time transaction can be parlayed into "repeat business," of course, unless the salesman implants confidence into clients' minds. That confidence must include trust in the line he represents and in the people who put it on the market.

In this connection it might be noted that some buyers relax naturally and easily in the presence of curly-headed blondes. Others prefer sophisticated brunettes, or wild redheads. Whatever their personal preferences as to sales types, they do react practically to a sensible proposition in most cases. That's why a salesman can overcome handicaps over which he has no control by bearing down on the qualifications of the firm he is honored to represent in the field.

Too many gripers blame their failures-to-sell on "home office" foolishness and lack of vision, or anything but themselves. They'd be better off, better thought of, and make more money, if they would devote extra time to the sales problems of their customers—instead of looking for alibis and daydreaming about how they could do somebody else's job better.

All good salesmen are pridefully sensitive, and rightfully so. They're the boys who bring in the business. Nevertheless, they shouldn't be too proud to accept advice from those who've preceded them. The latter usually have learned plenty from either bitter or enviable experience, or both.

Not only do smart salesmen listen to their elders in the home office. They adapt this advice, which is drawn from actual experience, to new situations—and then develop imaginative interpolations and interpretations of their own. In other words, they can pyramid the experience of others.

Memory is a marvelous aid to success. Salesmen who add the stored-up knowledge of experts to their own practical discoveries can acquire the finest sort of productive self-confidence. Thereupon they should grow in stature until they can command almost any merchandising situation.

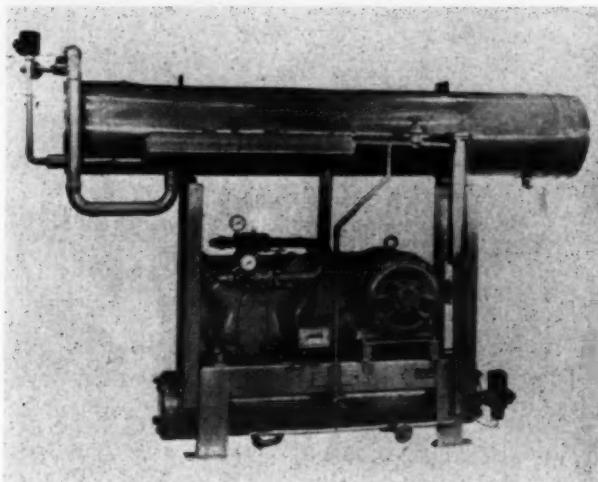
Above all, every salesman should enjoy his work—and show that he does. If he isn't obviously or apparently happy all the time he's seen and heard, a salesman should seek and find a different occupation. Otherwise he won't do much good for himself or for his company.

Confidence, loyalty, and happiness are contagious. They go hand in hand with high sales volume.

Copyright
1953.
Business News
Publishing Co.

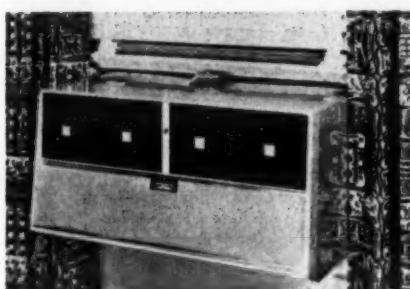


AIR CONDITIONING (Year-Round Residential)

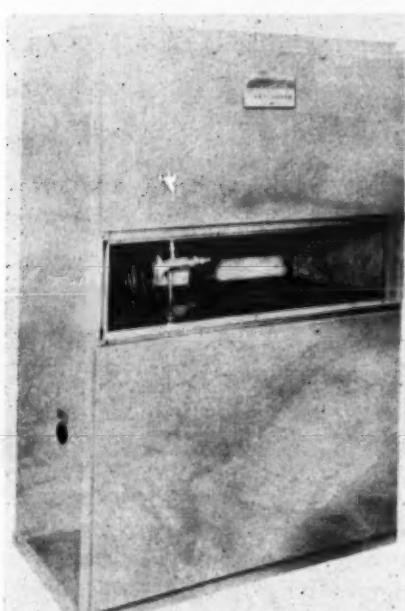


PACKAGED LIQUID COOLING UNITS are now manufactured by Worthington in a capacity range of 3 to 150 tons for air conditioning and industrial processes.

New Worthington Line--



NEW WINDOW-TYPE air conditioner is available in $\frac{1}{4}$ and 1-hp. sizes. Outstanding features are: one-dial control, directional air flow, and control for night operation.



RESIDENTIAL AIR CONDITIONER provides year-round air conditioning in conjunction with any forced warm air heating system.

(Concluded from Page 1)

and 5-ton sizes that can be used with any forced warm air heating system for year-round air conditioning.

Room air conditioners, both floor and ceiling mounted, for use with central systems. These heat or cool with water piped from a central source and are available in capacities of 200, 400, and 600 c.f.m. Direct expansion units are also available.

A line of reciprocating compressor and condensing units for "Freon-12," "Freon-22," and ammonia with capacities from 3 to 150 tons. Among their features is an electric unloader which permits variable capacity control and starting-unloading without a complex system of oil or gas pressure lines. The company has prepared a sound film strip to point out the features of the compressors, which may be used for both air conditioning and refrigeration applications.

A new line of packaged liquid cooling units for air conditioning and industrial process applications with a capacity range of 3 to 150 tons. They are factory assembled and include compressor, drive, base, condenser, chiller, heat exchanger, piping, and controls.

The new equipment was scheduled to be shown at a distributor conference at the Rice hotel in Houston, Texas on Jan. 9 and at the Commodore hotel in New York City on Feb. 23. It will also be on exhibit at the International Heating and Ventilating Exposition from Jan. 26 to 30 in Chicago. Informal distributor meetings will be held in the LaSalle hotel.

The lines have already been shown to southeastern distributors, who saw them at St. Simons Island, Ga. on Dec. 5-7.

G-E Conditioners--

(Concluded from Page 1)

climates where less heating and more cooling is required, the new line has units sized specifically to meet that need. The same holds true for places where more heating than cooling is required, he added.

This flexibility and wide range of choice is also carried out in the fuel used for winter heating. Either gas or oil, whichever is preferred in a particular locality, may be used.

The year-round air conditioners are completely self-contained packaged units and are finished in an attractive two-tone gray that blends in with any color or decorating scheme.

One of the outstanding features of the new G-E line is the compact size of the units. The smallest unit takes up only 8.3 sq. ft. of floor space and the largest occupies 15 sq. ft. of floor area.

Each model has a factory-sealed refrigeration system based on a newly-developed hermetic compressor. This system carries a five-year warranty.

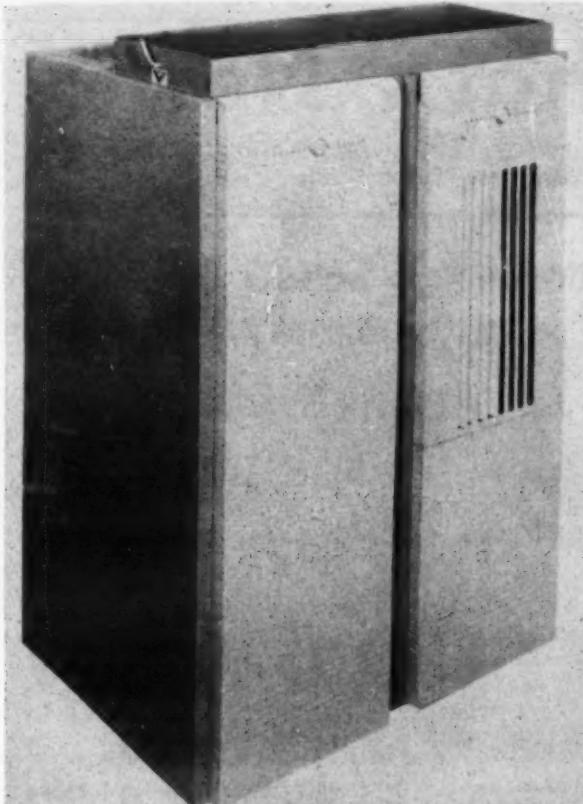
"Special attention has been given to ease of maintenance and service with all service easily done from the front of the unit," it was stated.

The G-E residential air conditioner automatically cools when it is hot, dehumidifies when it is muggy, and heats when it is cold; it also filters and circulates the air. Master thermostat control the temperature.

Price of the new unit installed in a new house is expected to run from \$800 to \$1,200 more than it would cost for a good forced warm air heating system. The actual price will depend on the size of the house, its location, and installation problems.

General Electric also announced that it has restyled and redesigned its home cooling units and has expanded its line to include a 5-ton unit, along with the 2 and 3-ton models it has been making.

Incorporating essentially the same cooling design features found in the year-round air conditioners, these packaged units are being produced



GENERAL ELECTRIC year-round air conditioner.

for use in existing homes with suitable forced warm air heating systems.

The separate G-E home cooling units are 55 in. high and 30 in. deep. The 2 and 3-ton air conditioners are 21 in. wide while the 5-ton unit is 25 in. in width.

These self-contained air conditioners are easily connected into existing warm air heating systems to provide year-round air conditioning for the homeowner, it was pointed out.

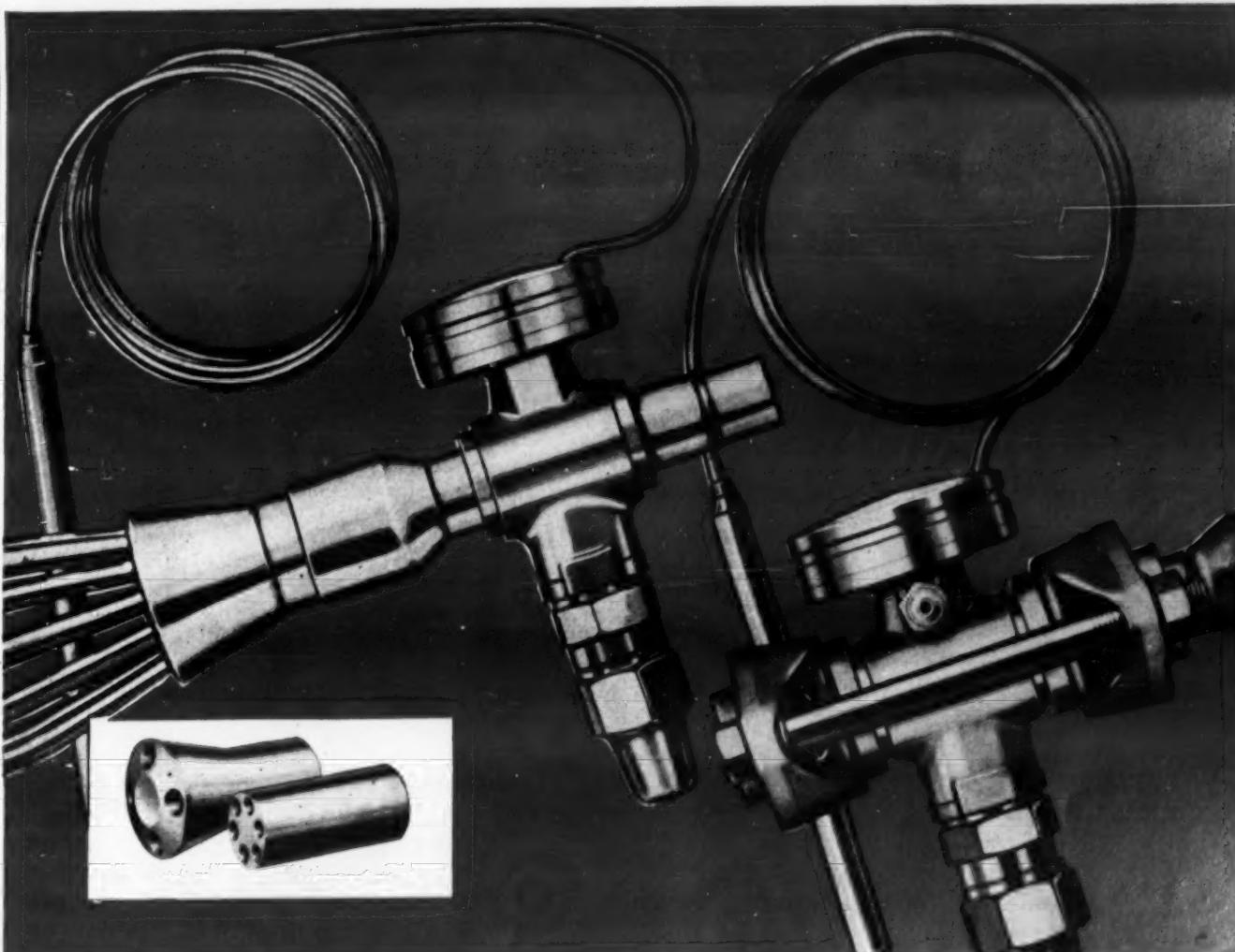
The coordinated styling and design of both the G-E air conditioning and furnace lines makes it possible to install one unit now and add another at a later date, and still get matched performance and appearance.

ASHVE Meetings Set

NEW YORK CITY—Future meetings in Denver and Houston following its convention in Chicago this coming January have been announced by the American Society of Heating and Ventilating Engineers.

The Chicago meeting will be held Jan. 26 to 29; Denver, June 22 to 24, and Houston, Jan. 25 to 29, 1954.

This valve is a NATURAL for air conditioning!



Here's why Model 216 is a "BEST BUY"

Designed for use on large air-conditioning and commercial applications, the A-P Model 216 will accurately meter refrigerant either to single or multiple coils. Operating on the time-tested A-P liquid charge principle, it provides trouble-free operation in any ambient temperature . . . in any position.

Available in either sweat or flange-type bodies, both models incorporate all the precision construction features that have made A-P valves so dependable. Both models have $\frac{1}{4}$ " flare external equalizer connections, and "Equa-Flo" distributors, for multiple-feed coils, can be furnished for both models. Adjustable superheat, with range sufficient for all application variations. Capacity 3 $\frac{1}{2}$ to 11 tons F12.

FREE—
Big New Application
Manual

Just published! New A-P Product Application Manual gives valuable information on use of all refrigeration valves, strainers, dryers, etc. Send for your copy today.

A-P CONTROLS CORPORATION

2460 N. 32nd Street • Milwaukee 45, Wisconsin
For Export: 13 E. 40th St., New York, N. Y.
In Canada: A-P Controls Corporation Ltd., Cooksville, Ont.



DEPENDABLE Controls



Thermostatic expansion valves



Bleed-type automatic expansion valves



Two bleed-type models $\frac{1}{2}$ to 1-ton capacity



Large capacity solenoid valves



Water regulating valves

BE
SURE TO
VISIT US AT
**BOOTH
1107-1109**

INTERNATIONAL
HEATING AND VENTILATING
EXPOSITION
Chicago - January 26 to 30, 1953

DEPENDABLE Controls
FOR OIL . . . GAS . . . REFRIGERATION

A-P CONTROLS CORPORATION
Milwaukee Wisconsin

What's New

When requesting further information on new products, please use "Information Center" form.

'Scotch' Plastic Film Tape Seals Air Duct Joints



KEY NO. C-120

ST. PAUL—Use of "Scotch" plastic film tape No. 472 for joining air ducts and sealing the joints cuts installation time in half in both home and industrial heating and air conditioning installations, according to the manufacturer, Minnesota Mining & Mfg. Co., who explains that this method has been introduced and widely adopted in the Southwest.

Not only does the tape hold the joint with greater mechanical strength than screws but it also provides a more efficient seal against air loss, the company claims.

It ends the need for such tasks as drilling holes in each duct; securing the ducts with set screws; coating the joint with wheat paste; and wrapping the joint with asbestos paper.

Designed for use on round, square, or flexible metal ducts, the tape features 125% stretch with minimum "creep," a 9-mil thickness, and a high softening temperature of 240° F. Its vinyl plastic film backing, the company says, will withstand acids, alkalies, salt solutions, water, alcohols, ethers, and hydrocarbons. It is available in various widths on 36-yard rolls.

Circular Freezer Table Introduced by Jordon

KEY NO. C-121

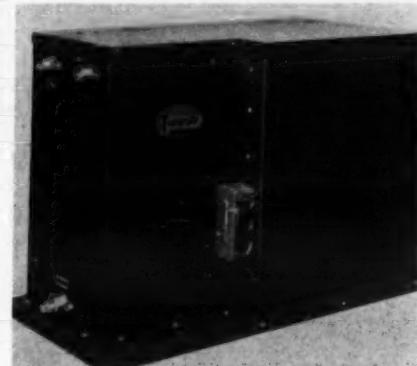
PHILADELPHIA—Said to be the first of its kind, a hand-made circular freezer table dreamed up by engineers of Jordon Refrigerator Co. was unveiled recently.

The table is a two-tiered affair with refrigerator coils built right into each circular tier. It is powered by a freezer unit with hermetic motor incorporated into the base of the table. Food can be kept frozen indefinitely on the open shelf tops.

It was cold comfort for a 25-lb. frozen turkey perched atop the coils on the upper shelf throughout the show. On the lower shelf, 12 in. below, a variety of packaged fruits and vegetables were also kept frozen. The table was designed especially

for the display of frozen foods at the show. It may soon be produced commercially for use in food and grocery stores, because of the wide interest it created, Harry Fogel, vice president and sales director, announced. It is also suitable for restaurant displays.

Only 45 in. in over-all height, the table is a compact unit adaptable to end-of-counter displays to stimulate frozen food buying. The top tier level is 18 in. in diameter and the lower level shelf is 28 in. across.



Once-Loaded, Multipop Pops 24 Qts. of Corn

KEY NO. C-123

TOLEDO—Described as the first repeating domestic electrical corn popper, the "Multipop" model No. 24, has been introduced by Associated Sales here.

After its anodized aluminum dome is filled with 2 lbs. of corn and its glass jar filled with a pint of popping oil, 12 2-qt. bowls of popped corn can be produced at the turn of the knob which automatically meters the correct amounts of corn and oil into the bowl.

Any desired interval may occur between bowls as both corn and oil are kept in perfect condition indefinitely, the manufacturer said.

Multipop is adjustable for any type of corn and is easily cleaned. List price is \$19.95, Federal excise tax included.

End-Point Control Provided By M-H Cut-Off Relay

KEY NO. C-124

PHILADELPHIA—A cut-off relay for providing end-point temperature control for processes requiring automatic shutdowns and manual resetting has been developed by Minneapolis-Honeywell's Industrial Div. here.

The relay operates with an electric temperature or pressure controller and a solenoid or motor-operated valve. The relay has a capacity of 13 amperes at 115 volts, and 6.5 amperes at 230 volts. It measures 5 1/4 in. by 4 1/16 in. by 2 5/8 in.

Information Center



For more information on What's New products, current literature and catalogs available, equipment advertised in AIR CONDITIONING & REFRIGERATION NEWS use Key Numbers where designated or specify products advertised and we'll see that you receive this information promptly.

What's New or Current Literature Available

Key No.	Key No.
Key No.	Key No.
Key No.	Key No.
Key No.	Key No.

Products Advertised
(list name, page, and issue date)

(PLEASE PRINT PLAINLY)

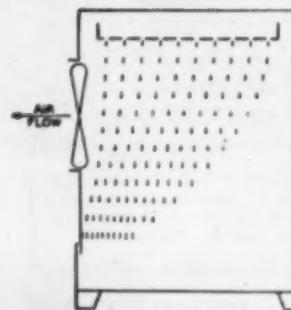
Name Title
Company
Street
City Zone State
Type of Business

MAIL THIS FORM TO

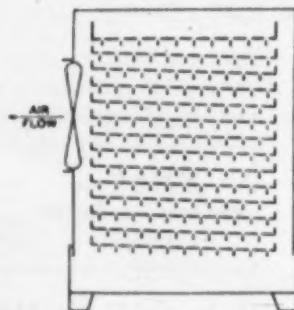
AIR CONDITIONING & REFRIGERATION NEWS
Reader Service Dept.
450 W. FORT ST. DETROIT 26, MICHIGAN

MORE CAPACITY

The redistributing decks keep the water uniformly suspended, providing maximum contact between air and water.



Conventional Fill



Kramer Fill

LONG LIFE

Casing and sump are heavy gauge steel, hot dipped galvanized after fabrication. Redistributing decks are metal and fireproof.

EASY INSTALLATION

Unit is shipped assembled but can be knocked down to eliminate rigging costs. One fitting required for drain and over-flow.

WRITE NOW FOR
BULLETIN NO. R-225

KRAMER TRENTON CO. • Trenton 5, N.J.



This 10.8-cu. ft. Cyclo-matic Imperial model (IS-108) combines in a single cabinet a separate, sealed, and insulated food freezer and refrigerator with separate exterior doors. Cyclo-matic cooling and automatic defrosting system is also a feature.

Frigidaire 1953 Appliance Models--

(Concluded from Page 1)
ful new styling has been incorporated into all new models."

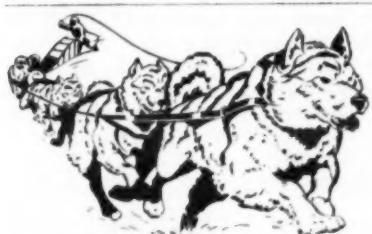
The big new 10.8-cu. ft. Cyclo-matic Imperial model IS-108, priced at \$509.95, combines in a single cabinet a separate, sealed and insulated food freezer and refrigerator with separate exterior doors.

The Cyclo-matic system provides zero temperatures in the food freezer at the top of the cabinet, which is completely sealed off from the refrigerator below. Zero-zone temperatures are maintained by a separate system of refrigerating coils in the sides, top, and bottom.

The freezer has space for more than 73 lbs. of frozen foods. Also included are four gold-and-blue aluminum Quickcube ice trays which will freeze 8 lbs. of ice cubes at once. Each tray is equipped with special built-in tray release and lever to "pop out" cubes as required. The walls, top, bottom, and separate exterior door of the freezer are insulated.

This same Cyclo-matic system provides completely automatic defrosting in the refrigerator compartment without any application of heat or manual controls. Frost is melted before it collects on the new and exclusive "Refrig-o-plate" refrigeration unit on the rear wall of the refrigerator, and excess moisture is carried to the new, larger Moist-Minder container at the bottom of the cabinet where it is evaporated automatically.

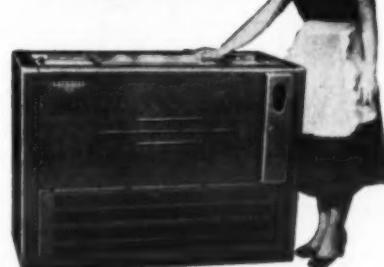
The refrigerator defrosting operation is completed without endangering or "mushing" frozen foods in the freezer above. Safe temperatures are maintained in the refrigerator by concealed Cold-Wall cooling coils in the back and bottom and by the Refrig-o-plate unit.



SUPREME BOTTLE COOLER

Economy and efficiency team up to make this low price—high quality cooler more and more popular in schools, restaurants and hotels where refrigerated storage for milk and other dairy products is needed. Exterior blue baked enamel or stainless steel . . . stainless steel lids . . . 3" Fiberglas insulation . . . Model 461—4' length illustrated. Also available in 6' lengths.

FOLLOW THE LEADER in quality refrigeration



SELF CONTAINED BLUEBIRD BOTTLE COOLER

Here is outstanding beauty—here is a new high in convenience, efficiency and economy. Only 33½" high, the Bluebird fits snugly under counters and bars, has easy operating push back doors and is perfect for dispensing milk, dairy products, soft drinks, etc. Comes in electric complete or remote models. 4'—6'—8' finished in Blue Hammerloid or stainless steel. Truly another LEADER FROM LA CROSSE.

LA CROSSE COOLER CO.

Factory and Gen'l Offices: 2801 Losey Blvd. S., La Crosse, Wis.
Export Office: 80 Broad St., New York City. Cable Address: Eximport.



Frigidaire 30-in. range (RS-35), features four surface cooking units and more usable oven space than many larger ranges—all within a 30-in. cabinet. It is equipped with a new, restyled combination cooking-top lamp and control panel.

than 41 lbs. of frozen food; and a full-length door. An insulated interior door on the freezer keeps the cold inside and also serves as a handy shelf when open for loading or unloading food. Quickcube ice trays will freeze 6 lbs. of ice in 42 large cubes.

The food compartment has three full-width shelves, including one split shelf, and one removable half-shelf, providing 16.5 sq. ft. of storage area. All shelves can be removed for cleaning or to store large bulky items.

Also included is a full-width chill

drawer and built-in season control to regulate air circulation in the food compartment; a half-bushel capacity fruit and vegetable Hydrator; automatic interior light; and three handy blue plastic door shelves.

Like the top-line Imperial model, this standard refrigerator has a sturdy, one-piece steel cabinet, special insulation, porcelain-finished food compartment, leveling glides, Cold-Control, and many other Frigidaire features. Both new refrigerators are operated by a Meter-Miser refrigeration unit and are covered by a five-year protection plan.

One of two improved 30-in. range models (RS-35), equipped with four surface cooking units and more usable oven space than many larger ranges, has a new, restyled combination cooking-top lamp and control panel.

Included are: A new, wide lamp; an electric clock and Cook-Master automatic oven control; time-signal, oven signal-light; and electric outlet for small appliances.

This compact range features a one-piece flowing-top for easier cleaning, slanted front to make control knobs easier to use, and a protective back panel that fits flush against the wall.

One of the most important features of the range is its extra-large oven. Measuring 23 in. wide, 16 in. high, and 16 in. deep, it will easily hold six pies or 10 loaves of bread, big oven meals, roasts, and cakes. The oven is economical to operate because of even heat distribution and thick insulation on all six sides.

There is a large full-width storage drawer fitted with nylon rollers. The cabinet and oven of the range are finished in lifetime porcelain. Overall dimensions of the range are 49½ in. high at the top of lamp, 36 in.

high at cooking top, 30 in. wide, and 27½ in. deep.

Another model (RS-30) of similar design but without the cooking top lamp, electric clock, Cook-Master, and storage drawer is only 43 in. high at the top of the back.



specify and buy
RUDY
CONDENSERS

Available for any application
... clean ... strong ... tight
... low cost, high quality ...
built in modern plant ...
prompt service.

WRITE FOR DETAILS

RUDY Manufacturing Co.
Specialists in
Manufacturing Evaporators and Condensers
DOWAGIAC, MICHIGAN

NOW
A FULL LINE OF
CONTINENTAL
RED SEAL
SINGLE-CYLINDER FOUR-CYCLE
AIR-COOLED
INDUSTRIAL
ENGINES
3/4 to 2 1/2 h.p.

AC Series
3/4 to 1 1/2 h.p.
Shown equipped
with Contex
External Ignition
System *

AD Series
2 1/4-2 1/2 h.p.

AW Series
2 1/4-2 1/2 h.p.

AA Series
2 1/4-2 1/2 h.p.

CONTINENTAL MOTORS
Powerful as the
NATION
AMERICA'S STANDARD

PARTS AND SERVICE IN EVERY COMMUNITY

Underlying users' growing preference for Continental Red Seal power—in air conditioning and refrigerating equipment as well as lawnmowers, garden tractors and similar machines—is the fact that every Red Seal is engineered and built expressly for its job. A Continental Red Seal is NEVER "just

* THE EXCLUSIVE CONTEX EXTERNAL IGNITION SYSTEM — AVAILABLE ONLY ON CONTINENTAL — SLASHES SERVICING TIME, DOUBLES LIFE OF PLUGS AND POINTS. WRITE FOR INFORMATION TODAY!

Continental Motors Corporation

AIR-COOLED INDUSTRIAL ENGINE DIVISION

12800 KERCHEVAL AVENUE • DETROIT 14, MICHIGAN



RSES Officers and Directors for 1953

GUIDING RSES activities during the coming year will be this group of officers and directors, which, except for two directors, were all re-elected at the Miami convention:

Front row: H. T. McDermott, secretary; J. D. Noll, first vice president; C. W. Neisel, president; Charles G. Bell, second vice president; J. Marshall Lock, sergeant-at-arms.

Middle row: Directors Wm. E. Tierney, Al Dellheim, J. L. Hall, Wm. B. Peek, Ralph Lampie.

Back row: Directors Einer Hansen, George R. Klahn, John D. Mendell, J. M. Turner, Max F. Hunter, and Educational Director Paul Reed.

Not present for the picture were M. R. Hanks, treasurer, and John H. Spence, chairman of the educational and examining board.

Gill Equipment Established To Service Foreign Firms

NEW YORK CITY—Formation of Gill Equipment Corp. here has been announced by Edwin C. Gill.

He said the prime function of the new company, located at 149 Broadway, will be to service foreign outlets with respect to their refrigeration and air conditioning require-

ments.

For the last four years, Gill was Atlantic States division manager for C. V. Hill & Co. Prior to that, he was associated with International General Electric as sales engineer in charge of packaged air conditioning and commercial refrigeration.

Standard Supply In Mass. Handles Tecumseh Line

TECUMSEH, Mich.—L. W. Larsen, sales manager of Tecumseh Products Co., has announced the appointment of Standard Supply Inc. of Worcester, Mass. to handle the complete line of Tecumseh compressors, units, and parts.

Standard Supply has been operating in the Worcester area since 1937 and recently opened a branch store in S. Norwalk, Conn. According to Robert W. Shepherdson, president, the firm employs four outside salesmen—two in the Connecticut area and two in the Worcester area.

An unusual feature of this concern is that each outside salesman is furnished with a Plymouth "Suburban." These cars are used for transportation and delivery of material directly to the customer, providing flexibility to the over-all organization.

Shepherdson states that this plan has resulted in better service to his customers with a reduction in sales and delivery expense.

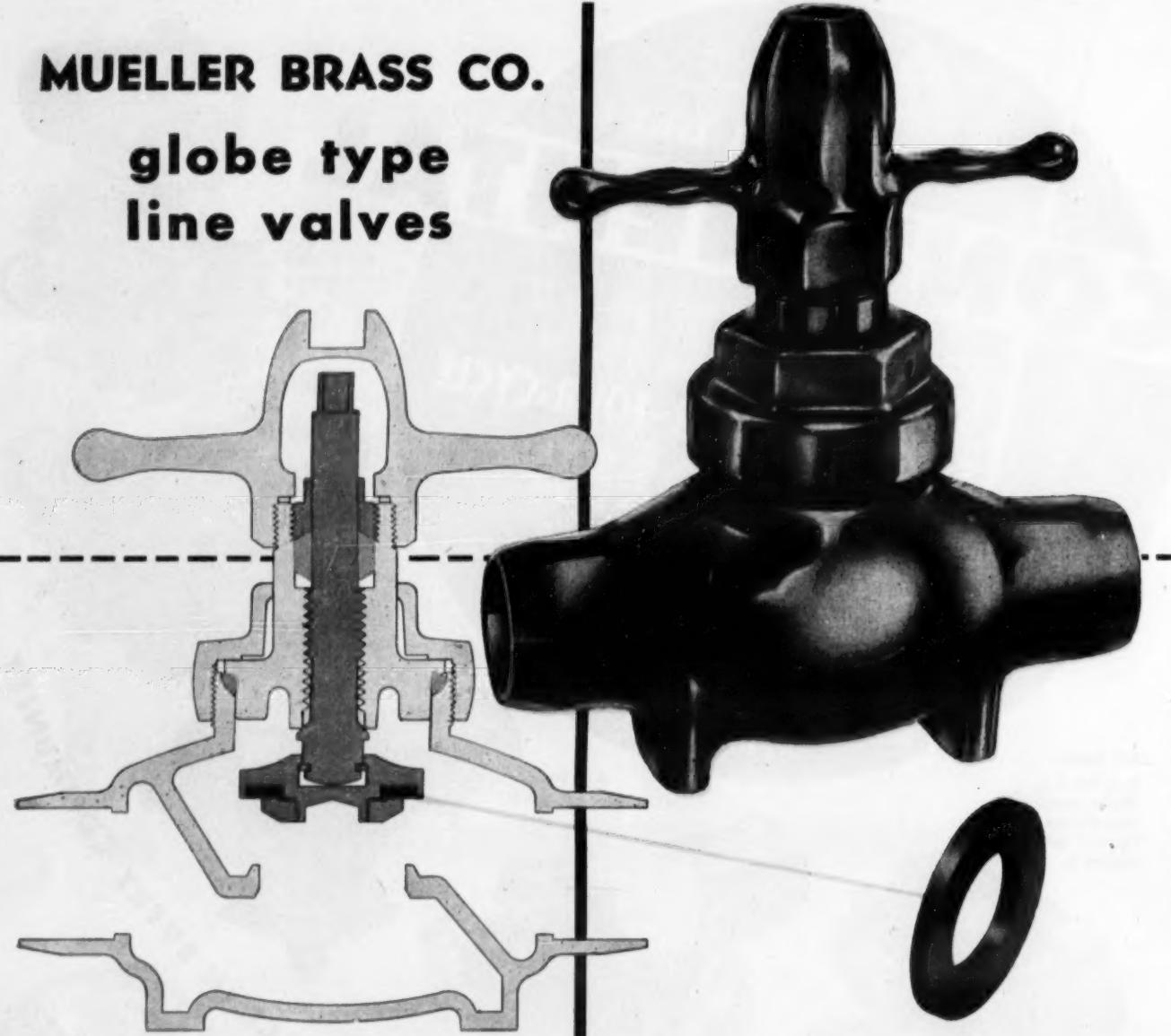
D. J. Gott Heads Western Office of Detroit Controls

DETROIT—E. J. Doucet, vice president and general manager of sales for the Detroit Controls Corp., announces the appointment of D. J. Gott, as manager of the newly created western regional office in Los Angeles, effective Jan. 1.

Gott's previous post as representative in the San Francisco area will be filled by E. C. Ward, formerly of the Detroit sales office.

MUELLER BRASS CO.

globe type line valves



Mueller Brass Co. Globe type line valves, developed after long research and proved under the most severe operating conditions, are designed and built for quick, easy installation and long, satisfactory service.

The superiority of the nylon stem disc has been proved in thousands of tests in both laboratory and field. It's resilient, tough, and can't be beat for refrigeration valve seating. This disc shuts off the flow perfectly and easily . . . even when foreign materials get lodged against it. The stem is the back-seating type . . . providing double seal protection.

A Neoprene "O" ring between the bonnet and the valve body provides a positive seal regardless of the range of temperatures and pressures. As the union collar is tightened, the ring is compressed until its shape in cross-section is triangular, which utilizes both the "O" ring and gasket principle to provide an effective and permanent seal.

The non-porous cast bronze body is polished to a high lustre that makes an attractive installation in any system.

Write for our latest catalog describing the complete line of Mueller Brass Co. STREAMLINE products.

DRIERS AND FILTERS

WROUGHT COPPER FITTINGS

FLARE FITTINGS

LIQUID INDICATORS

VALVES



A few exclusive Pinnacle Territory Franchises are still available. Write or wire today for full information!

CUSTOMERS . . . DEALERS . . .

Everybody's Pointing to

PINNACLE

America's Complete Line of COMMERCIAL REFRIGERATORS!

FREE FOLDERS OF COMPLETE LINE

Pinnacle
EQUIPMENT CORPORATION

Export Dept.: 39 Broadway, New York

- FULL VISION FREEZER CASES
- FULL VISION GASES
- DELICATESSEN CASES
- BUTCHER CASES
- BAKER CASES AND FREEZERS
- REACH-IN FREEZERS
- OPEN SELF-SERVICE
- REACH-IN BOXES
- WALL BOXES

MUELLER BRASS CO. PORT HURON 9, MICHIGAN

Service & Supplies

JEAN PRODUCTS INC.
BROOKLYN, N.Y.



PLATE-TYPE EVAPORATORS for refrigeration systems come in many types and shapes, as Rubin Raskin of Dean Products Co. explains in using this novel display to point out the various types to Kermit Dixon, James Faidren, and K. E. Buck, all of Mobile, Ala.

Hirons Named To Manage Navajo Agents Coverage Big Bohn Aluminum Plant For Allin Expanded

DETROIT—Appointment of A. J. Hirons as manager of Bohn Aluminum & Brass Corp.'s Plant 24 at Adrian, Mich., has been announced by S. D. DenUyl, president.

This is the huge aluminum forging and extrusion plant containing some of the largest forging and extrusion presses in the country which Bohn built and operated for the government during World War II and which they are presently operating under lease from the U. S. Air Force.

Hirons, who has been with the company for over 23 years in several management jobs, will continue as manager of the Bohn Plant 13 at Adrian.

Marines Have Plenty Of Cool Water Aboard Ship

BREWSTER, N. Y.—"Water, water everywhere, but not a drop to drink," was the Ancient Mariner's trouble. But modern marines—men aboard the U. S. Navy's submarines—don't have that problem.

Typical are the "Diodon" and the "Cutlass." Aboard these subs, Heat-X cast aluminum water coolers chill ample quantities of drinking water to supply officers and crewmen.

The Heat-X-Changer Co. here reports that one HX-15 was installed in each sub. These units are connected into the refrigeration circuit on each ship and have a cooling capacity of 15 gals. per hour.

M-H Appoints Coffman To Wichita Sales Post

WICHITA, Kans.—Wilson R. Coffman has been made industrial manager of the Wichita branch office of Minneapolis-Honeywell Regulator Co. Most recently he has been on the Kansas City, Mo. field staff of the company's Brown Instruments Div.

Indian Refrigeration Assn. Elects Bertsch President

BOMBAY, India — E. A. Bertsch was elected president of the Refrigeration & Air Conditioning Trades Association Ltd., Bombay, at the group's third annual general meeting. J. C. Kapur was named vice president.

Bertsch succeeds Mohan T. Advani. In a talk to the association, Advani said it had been recommended to the Chief Controller of Imports that the quota of 50% of the past best year's imports for general licenses fixed for refrigeration and air conditioning machinery be increased to 100%.

Copper Product Price Lids Extended to April 1 by OPS

WASHINGTON, D. C.—Ceiling prices of brass mill and copper wire mill products can be kept at current levels until April 1 instead of March 1, the previously-set date for any readjustment, the Office of Price Stabilization announced.

The agency said the extension was ordered because there has been no change in the price of foreign copper since last July when it was 36 1/2 cents a pound.

Realtors Hear Engineers Present Details On Cost Estimates, Data on Air Conditioning

NEW YORK CITY—Further recognition of air conditioning's increasing importance as a factor in residential and business construction was indicated by the management division of the Real Estate Board of New York, Inc. devoting its recent monthly meeting to semi-technical talks on the subject by two engineers.

Cost estimates and general information were presented by A. Wilson Knecht, partner in the firm of Seelye, Stevenson, Value & Knecht, and Erik B. J. Roos.

One ton of refrigeration, Knecht told the realtors, will generally air condition 200 to 350 sq. ft. and costs from \$1,000 to \$1,500. This represents a cost per sq. ft. of \$3 to \$7.50.

Cost of each installation will differ, he cautioned, depending upon the number of people in the space to be conditioned, the location, lights, drafts, possible odors, and dirt.

Usual aim of an air conditioning system, Knecht also explained, is to produce an effective temperature of

74°, which he said was an arbitrary figure but has been found to be satisfactory for about 70% of building occupants.

This effective temperature can be obtained by combining a temperature of 80° F., 50% r.h., and an air movement of 15 to 25 f.p.m.

Although the same effective temperature of 74° can also be obtained by dropping the dry bulb temperature to 78° and raising the humidity to 65% with a consequent 29% saving in refrigeration, Knecht commented that this combination risks a feeling of clamminess and greater degree of shock for persons coming into the space.

He also emphasized that air motion is necessary to permit removing or supplying heat and further that it has a good psychological and physical effect. To avoid a drafty effect, however, air motion should be kept below 35 f.p.m.

Grover Named Ad Head of RCA Room Conditioners; To Succeed E. B. Close

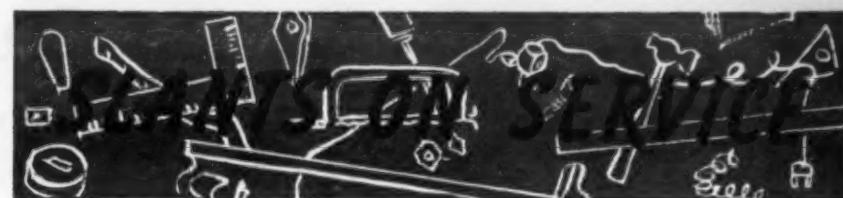
CAMDEN, N. J.—Paul W. Grover has been appointed manager of advertising and sales promotion for RCA room air conditioners, it was announced recently by W. F. Carolan, general sales manager of the air conditioner department of the RCA Victor Div., Radio Corp. of America, here.

The appointment became effective immediately.

Grover replaces E. B. Close, who has resigned to join Patterson Productions, Philadelphia.

Grover comes to RCA Victor from the T. A. O'Loughlin Co., television distributor in northern New Jersey, where, for almost six years, he served as advertising and sales promotion manager.

Prior to that, he directed the advertising and promotion activities for Krich-New Jersey, Inc., RCA Victor distributor with headquarters in Newark.



Tape Holds Small Screws

Small screws, nuts, washers, etc., which are removed during a repair job can easily become lost. One serviceman suggests placing them on the sticky side of a piece of tape, such as masking tape, on the floor. The tape keeps the things from rolling away and can be easily seen.

Westinghouse Lists Normal Wattage Readings for Units

Normal wattage readings on its household refrigerators produced from 1930 to the present time have been listed by Westinghouse. All the units listed below are either $\frac{1}{2}$ or $\frac{1}{4}$ -hp. 60-cycle units operating on 110 volts. The wattage figures given

are for a range of 100 to 125 volts and an ambient temperature of 70° to 110° F.

(Low voltage and/or low ambient will lower the wattage reading. Likewise, high voltage and/or high ambient will increase the wattage.)

Year	Model Lines	Wattage
1930-32	A	170-260
1933	B	150-195
1934	C	150-195
1935	D	150-195
1936	E122-E123 ES, EF	145-200
1937	F	160-265
1938	H	160-265
1939-40	J	165-265
1940	K	155-220
1941-42-43	L	150-220
1947-52	M	150-255

O. A. Sutton Corp. Plans Sales Expansion

WICHITA, Kans.—Plans for expansion of the sales organization of O. A. Sutton Corp. here were announced recently by A. Rising, vice president and sales manager.

Present plans include the placement of a factory trained sales representative in a number of sales districts throughout the nation.

"This expansion is largely due to the unprecedented demand for 'Vornado' air conditioners and air circulators throughout the nation," Rising said, "and we are making every effort to keep pace with the demand by employing experienced appliance salesmen and training them as factory sales representatives."

Each Vornado sales representative will be equipped to help dealers and distributors get maximum results from their advertising, merchandising, and sales programs. They will work directly under the district sales managers in their areas assisting in this dealer sales training program.

"Although we already have added several factory sales representatives to our organization, we plan to employ additional men with an appliance sales background for training on these jobs," Rising added.

Roth Appointed Distributor Of Fedders Room Coolers

MILWAUKEE — Roth Appliance Distributors here has announced its recent appointment as exclusive distributor for Fedders room air conditioners and dehumidifiers in Wisconsin and upper Michigan.

Other products distributed by Roth are Norge gas and electric ranges, refrigerators, home freezers, and water heaters; KitchenAid dishwashers; Stromberg-Carlson radio and television receivers; Toastmaster electric water heaters; Temco gas heaters and clothes dryers; Waste King "Pulverators"; General Electric vacuum cleaners; and Geneva kitchens.

JUST ASK US

Turn to "What's New" Page for useful information on new products.



Now 100% improved—and 100% foolproof with new fiberglass depth filter for increased filtering capacity—and new MOLDED Remcal Drying agent for increased moisture-absorbing capacity and improved efficiency. Also with silica gel. Capacities 1-1/2 thru 5 tons. Send for descriptive folder.

REMCO INCORPORATED ZELIENOPLE, PA.



First to build a room air conditioner to fit all Steel and Aluminum Casement windows.

NOW WE BUILT another room air conditioner that can be installed in just one window opening as small as 10 $\frac{1}{4}$ " high and 14 $\frac{1}{2}$ " wide. Consumer demands by those owning casement windows had to be met for an air conditioner that would eliminate costly window modifications. Here it is! And so easy to install, in less than 30 minutes by either service man or customer. It requires no special framing, window brackets or wing adapters—no installation kit needed. Just slide-in... hook-in and plug-in, as simple as that. No window mullions and muntins altered, mutilated or destroyed, no drilling, cutting or filing.

THERE IS NOT A WINDOW MADE (CASEMENT OR DOUBLE HUNG) THAT THE DEERING WILL NOT FIT.

Think of the increased sales this will mean for you, no matter what line you are now carrying, you can have a truly complete room air conditioner line that will mean more sales and more customers.

ACT NOW!

PROFIT IN 1953 FROM
A BRAND NEW DIMEN-
SION IN ROOM AIR
CONDITIONING

Yes!

I am interested in a franchise for the DEERING casement window room air conditioner. Please rush me full information.

Name _____

Company _____

Position _____

City _____

Zone _____ State _____

MAIL TODAY TO

THE DEERING AIR CONDITIONING COMPANY
1049 CELESTIAL AVENUE • CINCINNATI 2, OHIO

The
deering AIR CONDITIONING CO.
CINCINNATI 2, OHIO

Mental Institution Gets Year-Round System

Heat Pump Supplies Hot Water on Emergency Basis; Elaborate 50-Ton System Includes Zoning, Electric Air Filters, Preheat, Reheat Coils

By C. Dale Mericle

RIDGE, Colo.—Both patients and staff are expected to enjoy the benefits of the year-round air conditioning system being installed at the State Home and Training School here.

Although not unusually large (50 tons) the system will be somewhat elaborate, having electric air filters, preheat and reheat coils, and zone controls, in addition to an unusual heat pump application.

The latter is to be employed in two radiant floor panel systems, one for each of the two solariums in the infirmary building at the institution.

In summer operation chilled water will be piped through the floor coils. During the winter, a steam heater will supply hot water for these

panels. The two 5-hp. water chillers, however, are to serve as standby equipment to supply hot water on the heat pump principle for the floor panels on an emergency basis.

These are Acme FTV-5 "Flow Temp" self-contained water-to-water heat pumps which are being installed by the air conditioning contractor, Rocky Mountain York Co. of nearby Denver.

Under the contract, this firm is installing heating in the basement of the boy's dormitory (cooling may be added later), heating in the basement of the infirmary, and a year-round system for the first and second floors of this building.

Benefits of the system are expected to include not only maintenance of comfortable temperature and humidity

conditions but also a sharp reduction in odors.

The latter is a serious problem in an institution such as this, which is devoted to the care of mentally retarded patients, mostly children. These unfortunate, having little or no self-control, represent a definite odor problem, which is hardly conducive to comfort of the staff and to the patients themselves.

Summer cooling for the installation will be provided by a York 50-hp. "Freon-12" compressor (F-3069-8BE) coupled with a Recold DFC-28 evaporative condenser. These two pieces of equipment are to be located in the machinery room at the end of the infirmary basement.

8 Air Handling Systems

Eight separate air-handling systems are being installed under this contract, each including a Trion electric air filter and a Recold air unit. Six provide both summer and winter air conditioning while two serve only for winter heating although they can be employed for ventilation during summer months.

Typical of the two winter air conditioning systems is that designed for the infirmary basement. Provision is made for future installation of cooling coils, but in the meantime heating will be provided by two single-row steam coils, one designated as preheat, the other as reheat.

For cooling it will be necessary merely to install a cooling coil between these two steam coils.

To prevent freeze-ups of the steam return lines from these coils as well as all the others in the installation, exposed lengths of the lines will be wrapped with electric heating cable. Similar heating cable will also be required on the water lines serving the humidifiers in each system.

Outdoor air will come into a mixing chamber and be mixed with return air before passing through the Trion electrostatic filter (07104). After going through the preheat coil, the air, or a portion of it, will go through the reheat coil and thence through a spray humidifier.

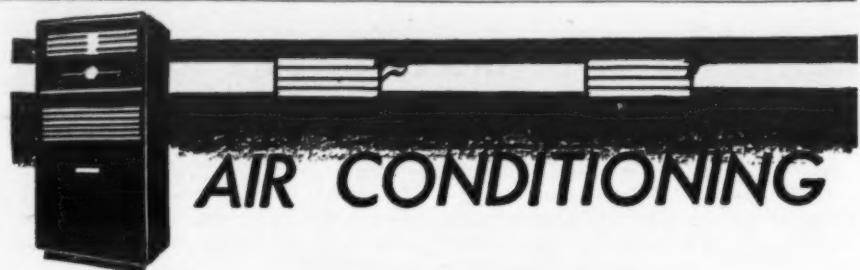
Basement Unit Handles 3 Zones

Three zones will be served by this basement unit, which will deliver a total of 2,400 c.f.m. The first zone, to receive 1,040 c.f.m., is one large room 36 by 44 ft. in size.

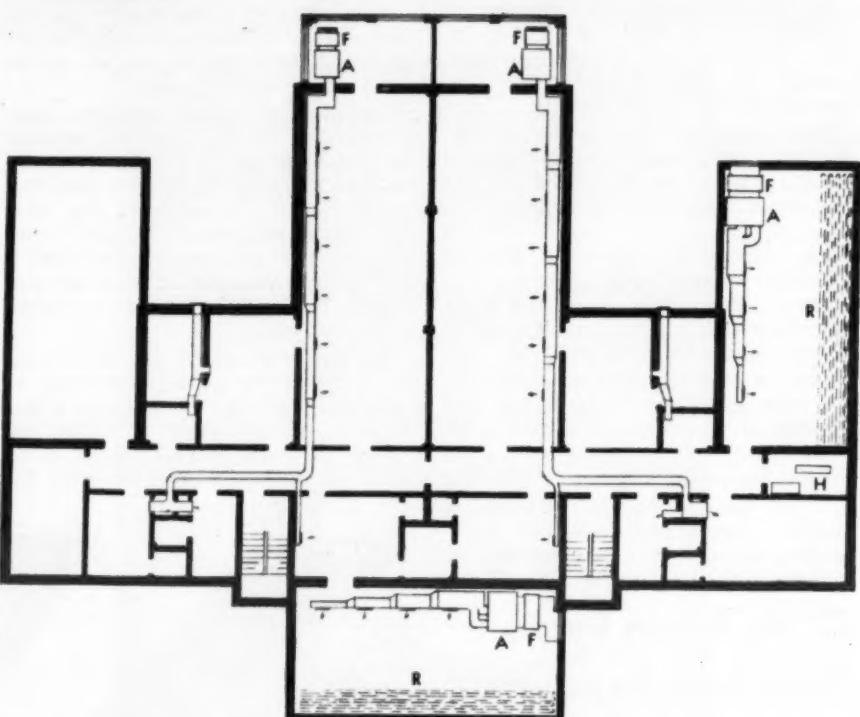
The second zone, receiving 700 c.f.m., will include a 10 by 10-ft. room, an 18 by 18-ft. room, a 13 by 18-ft. room, and a 20 by 39-ft. space. In the third zone, which will get 660 c.f.m., are four rooms, one 10 by 11 ft., another 20 by 32 ft., and two 14 by 18 ft.

Controls for this heating system are set up in the job specifications as follows:

"Pre-heat modulating steam valve



AIR CONDITIONING



FOUR AIR HANDLING systems and two radiant floor panels are being installed for second floor of infirmary at Colorado State Home and Training School near Denver. "F" above designates electric air filter; "A", air unit; "H", heat pump water unit; "R", radiant floor panel in solarium.

shall be installed to start to open at 40° F. by ductstat and shall be wide open at 0° F. Reheat coil modulating steam valve controlled by outdoor stat and shall be wide open at 30° F. Zone stats 1, 2, and 3 shall be installed to operate the proportioning after-damper in the air unit so that with rising room temperatures more air will bypass the reheat coil.

"Duct type room type humidistat shall maintain 30% r.h. on downstream side of air unit by actuating water solenoid and spray nozzles. Switch shall be installed to render inoperative after heating season."

Mid-season operation will call for 100% fresh air, but during the winter this system will be set for 80% return air.

Heating operation and control for the basement of the boy's dormitory and the heating side of the six year-round systems in the infirmary will be essentially the same as the infirmary basement system.

Compared to the 2,400 c.f.m. for the infirmary basement, the other systems range in size from 1,900 to 3,600 c.f.m.

There are to be two year-round systems on the first floor of the infirmary and four on the second. The

two solariums having radiant floor panels are also on the second floor.

The two first-floor systems will be virtually identical, each air unit being located on the porch and including a UHT-47 Recold unit with a six-row direct expansion coil, preheat and reheat steam coils and an 07103 Trion air filter. One system will serve eight rooms; the other, seven. An 18 by 50-ft. room will be on each.

These two systems will be designated as Zones 2 and 3, Zone 1 being the basement heating system.

Zones 4 and 5 are to be directly above on the second floor and will be essentially the same as the systems for Zones 2 and 3. Each of these two zones also will include a large 18 by 50-ft. room.

Solarium on Second Floor

A major difference on the second floor, however, is necessitated by the solariums, one on the south side of the building, the other on the west side. On the first floor the spaces directly below the solariums will be served by the two systems handling the whole floor. Each solarium, in contrast, will have its own air-hand-

(Concluded on next page)

A
Working Team
that Assures
Dependable,
Care-Free
Refrigeration



KLIXON
Dome-Mounted
PROTECTORS and
STARTING RELAYS

PLUS
KLIXON DEFROST
THERMOSTAT CONTROLS

Regardless of the type of hermetically sealed units that you use in your cabinets, you simply can't beat the combination of a Klixon Dome-Mounted protector, Klixon Starting Relay, and the new Klixon Defrost Thermostat Control.

The Klixon protector prevents motor burnouts. It helps to provide dependable refrigeration year in, year out by guarding the motor from becoming dangerously overheated. It prevents food spoilage, reduces repairs and replacements.

The Klixon motor starting relay starts the motor surely and quickly. Its positive action and long life eliminate starting troubles.

The Klixon Defrost Thermostat is now used on a number of major makes of refrigerators. You'll find it the most positive answer to your automatic defrost control problems.

Manufacturers of refrigeration units are invited to find out more about these Klixon products. Write on company letterhead for further information.

KLIXON

SPENCER THERMOSTAT
Division of Metals & Controls Corp.
2401 FOREST ST., ATTLEBORO, MASS.

WALL WIRE PRODUCTS COMPANY

A FOREMOST NAME IN
THE MANUFACTURE OF
DIVERSIFIED WIRE PRODUCTS
OF SUPERIOR QUALITY

STANDARD AND LIGHT WEIGHT
SHELVES OF ELECTRO-POLISHED
SOLID STAINLESS STEEL

REFRIGERATOR SHELVES WITH
CHROME PLATE, ZINC PLATE,
PRO SEAL, TIN, OR
PORCELIZED FINISH

WIRE GRILLES • DISPLAY FIXTURES • GUARDS • BASKETS OF
ALL TYPES FOR ALL PURPOSES
STEEL STAMPINGS • MISCELLANEOUS FORMED AND
WELDED WIRE ASSEMBLIES
ARC WELDED ASSEMBLIES

WALL WIRE PRODUCTS CO.
PLYMOUTH, MICHIGAN

IF THE WIRING FAILS



SO DOES YOUR
PRODUCT'S REPUTATION

FOR DEPENDABLE PRODUCT WIRING USE

UNILECTRIC **WIRING SYSTEMS**

Year after year — for over ten years — UNILECTRIC has produced millions of wiring systems, for more than 150 leading manufacturers of electric and electronic products. From freezers to complex armed forces equipment, these wiring systems have consistently met the most exacting requirements and provided substantial savings to each customer.

To assure utmost dependability plus cost saving engineering assistance, low cost production and "on-schedule delivery" investigate UNILECTRIC today.

UNILECTRIC **WIRING SYSTEMS**

Manufactured by
UNITED MANUFACTURING & SERVICE COMPANY
411 SOUTH 8TH STREET • MILWAUKEE 4, WISCONSIN

Mental Institution--

(Concluded from preceding page)
diling system in addition to the floor panels.

Temperature control of the floor panels near the outside walls is deemed advisable because the children will invariably be playing and crawling on the floor. The floors could feel cold in winter, and hot in summer due to solar radiation.

Zone 6 will be the south solarium while Zone 7, the west solarium. Each will have a Recold UHT-66 air unit and a Trion 07105 filter. The two rooms are almost identical in size, the south unit being 18 by 40 ft., the west, 18 by 38 ft.

The floor radiant panels for these rooms are to be made from $\frac{1}{2}$ -in. copper coils. The south solarium panel will have 10 rows 39 ft. long; the west, eight rows 36 ft. long. Each panel will run along the outside wall with 1 in. of Foampglass insulation below.

Acme "Flow-Temp" unit serving the south solarium floor panel will be located in an adjoining room at the end of the corridor, but the unit for the west solarium is to be on the first floor directly below.

These units and the steam heater coil which will be the primary supply for winter heating will deliver 15 g.p.m. of the 0° Prestone solution with which each floor panel system will be charged.

Winter Operation Outlined

Winter operation of the solarium systems is outlined as follows:

"Air unit: Preheat modulating steam valve shall be installed to start to open by duct stat at 40° F. and shall be fully open at 0° F. Reheat modulating steam valve shall be installed to maintain room air temperature at 74° F. by shielded wall stat.

"Humidistat, duct or room type, shall be installed to maintain a 30% relative humidity by operating a water solenoid valve and spray nozzles. Humidistat shall be placed on summer-winter switch to make it inoperative after heating season. Fifty per cent setting of five-position damper shall be by control switch.

"Floor panel: Temperature shall be regulated by modulating steam valve installed on water heater and controlled by shielded outdoor stat set to open valve at 70° F. and to be fully open at 0° F. Radiation stat shall be installed to have its controlling bulb in the return solution line to the pump and shall operate a modulating hot water flow valve so that a 120° F. return temperature is not exceeded.

Aquastat Prevents Overheating

"As additional precaution, however, an aquastat set at 140° F. shall be installed to actuate steam shut-off valve and to prevent overheating of the coil solution.

"To provide for use of the heat pump, in emergency, an outdoor stat shall be installed to modulate the solution flow by means of a modulating solution valve. A heat pump switch shall also be installed for this changeover operation."

Summer operation of the solarium systems will be controlled in the following manner, the specifications state:

"Air unit: Room stat shall be installed to modulate auditorium bypass with limit switch to close 'Freon' solenoid at complete by-pass.

"Floor panel: Return solution shall be installed to modulate solution flow valve to maintain approximately 78° F. panel. This operation shall be accomplished by installation of summer-winter switch.

Fewer Agreements, More Competitive Buying by Contractors Seen

MIAMI BEACH, Fla.—More qualified air conditioning contractors buying on an independent, freely competitive basis rather than operating under an exclusive sales agreement with one manufacturer was predicted for the industry by Ralph Lee, manager of unit heater sales for the Trane Co.

Lee, speaking before the seventh annual convention of the Refrigeration and Air Conditioning Contractors Association, elaborated:

"First, more qualified air conditioning contractors will be needed. I'm not suggesting that you should all have three times as many competitors in the contracting field as you now have.

ONE CONTRACTOR OVER ALL

"Rather, I would draw from known facts the implication that the air conditioning job of tomorrow will not be a heating job and a cooling job and a refrigeration job—but one contractor for one complete system of indoor climate control to be performed by one contractor.

"It does not seem logical nor desirable in the long run for such a system to involve one or two subcontracts. If we are to win out in our battle against cost in air conditioning, it seems one contractor, one overhead, and one responsibility is a logical development. The development of air conditioning equipment and application engineering may in effect rule out any other method of procedure.

"Secondly, it seems inevitable that exclusive sales arrangements common today between manufacturers and contractors of cooling equipment will, in the future, become increasingly uncommon.

"Heating equipment has been bought for years on an independent, freely competitive basis. With an increase in the number of qualified air conditioning contractors, it seems inevitable that cooling and refrigeration equipment will be handled in the same manner.

MAINTAINS IDENTITY

"There are many obvious advantages to the contractor in remaining independent of the manufacturer. Not the least of these is the preservation of his own business identity in the community which results from his own efforts in his own behalf.

"But equally important, the independent contractor bids all jobs, not just the few on which he may be specified. He sets his own sales goals and carries the inventory he deems necessary. He has or has not a sales force, as he decides.

"He advertises as he feels the need, of his own knowledge of his position, and he bids all jobs of whatever size if he desires with no sales agreement to keep him within bounds.

"The principle of free competitive buying is an ingrained part of the growth of the heating industry. It is difficult to predict any other course of events for the future of air conditioning."

Hunter Mfg. Names Avery West Coast Representative

CLEVELAND—Appointment of William C. Avery as field engineer for Hunter Mfg. Co. in 11 western states has been announced by Robert H. Hunter, president.

For the past several years, Avery has been sales engineer for Hunter in the midwest. His new headquarters will be in San Francisco.

A member of the American Society of Refrigerating Engineers, Avery was a sales representative for York Air Conditioning & Refrigeration Co. before joining Hunter.

Wins Air Cooling Contract

DALLAS—On its low bid of \$349,827, Matthews Engineering Co. has been awarded a contract for air conditioning the County Records and Criminal Courts buildings. The firm has guaranteed to have the air-cooling system in operation by next summer and completed in 185 days.

The low bid was within \$173 of the \$350,000 which had been set aside for air conditioning the six-story County Records building and the first two floors of the Criminal Courts building.

For Systems over 75 Tons

High Velocity, High Pressure Distribution Seen for Big Conditioning Installations

CHICAGO—Within two years virtually all air conditioning installations of 75 tons or larger will incorporate high velocity, high pressure air distribution systems, believes C. M. Wilson, sales manager of Anemostat Corp. of America.

Speaking at a recent meeting of the Illinois chapter, American Society of Heating & Ventilating Engineers, Wilson described high pressure, high velocity systems as those which generally require the use of special devices for the attenuation of sound and dissipation of pressure and velocity near the air outlets. After showing slides of various types of diffusers, Wilson described a high pressure, high velocity diffuser as essentially a conventional diffuser with a dampering device to reduce pressure, velocity, and sound.

Demonstrating how the use of velocities higher than those used in conventional systems results in smaller duct sizes, he then mentioned that advantages of this type of system include savings in space required for ductwork, savings in duct material and the cost of ductwork, in multi-story buildings savings in floor heights, the elimination of much "butchering" of existing buildings in order to install air conditioning.

An advantage to the contractor which he stressed is the fact that smaller ducts result in reduced labor costs so that a higher percentage of the total job cost is in connection

with material and equipment having readily determined costs.

Disadvantages mentioned included relatively higher fan operating costs and Wilson urged members not to go overboard on velocities. In his opinion, reasonable maximum velocities in the average high pressure, high velocity systems are from 3,600 to 4,000 f.p.m. However, circumstances often permit velocities up to 6,500 f.p.m.

The speaker was introduced by N. E. Bueter, Chicago consulting engineer, who also participated in the lively question and answer period which concluded the meeting. During this period both Wilson and Bueter stressed the fact that high velocity, high pressure systems are equally suitable for ventilating systems—particularly where noise problems are not important factors, as in boiler rooms.

Airtemp, Jackes-Evans Join REMA

WASHINGTON, D. C.—Two new members have joined the Refrigeration Equipment Manufacturers Association, the association announced recently. They are the Airtemp Div. of Chrysler Corp., which will be represented in REMA by M. T. Bard, assistant sales manager; and Jackes-Evans Mfg. Co., which will be represented by Roger P. Kipp, manager of the controls division.

Buy Peerless FOR PERFORMANCE



Flash Coolers Fin Coils Flash Pans

The Peerless Line of quality products is designed and constructed to meet every demand of modern commercial refrigeration. Our Flash Coolers, Fin Coils and Flash Cooler Pans have proved their superiority in performance under widely varying operating conditions. They are built with an eye to appearance, economy of space, and the utmost convenience in installation and servicing. Louvers fabricated from polished aluminum. Made in a wide variety of standardized sizes and styles—all of unchallenged Peerless quality. Write for Bulletin 49G today.

Peerless of America, Inc.
1501 No. Magnolia Avenue
Chicago 22, Illinois, U.S.A.

JUST ASK US!

Turn to "What's New" Page for useful information on new products.

EXTRA DRY ESOTOO (bp +14°F.)

The refrigeration grade SO, that service and maintenance engineers have endorsed for more than 20 years. Comes in all popular cylinder sizes.

V-METH-L (bp -10.7°F.)

"Virginia" Methyl Chloride is made specifically for refrigeration use. Its low moisture content, low acidity and narrow boiling range meet the most exacting requirements.

"VIRGINIA" DISTRIBUTES...

"FREON" REFRIGERANTS

(a product of "Kinetic" Chemicals)

"FREON-113" "FREON-114" "FREON-11" (bp 117.6°F.) (bp 38.0°F.) (bp 74.7°F.)

"FREON-12" "FREON-22" (bp -21.6°F.) (bp -41.4°F.)

SUNISO REFRIGERATION OILS PERMAGUM SEALING COMPOUND PRESSTITE INSULATION TAPE

TO CHARGE A SYSTEM, USE REFRIGERANTS THAT ARE CONSISTENTLY PURE, CONSISTENTLY SURE

STOP THAT DRIP with PRESSTITE INSULATION TAPE

Now you can stop that constant drip of suction lines, circulating cold water pipes, valves and fittings—stop it once and for all with Presstite Insulation Tape. It quickly and effectively insulates against condensation, and it's so easy to use anybody can apply it. Presstite Tape comes in rolls 2" wide and $\frac{1}{8}$ " thick. It contains 40 percent virgin cork and will adhere to any metal surface. Wrappings can be built up to any thickness desired. Joints are self-sealing. No cements or other wrappings are needed. The convenient package contains 30 lineal feet. Stop customer dissatisfaction before it can start—use Presstite Tape on all new and reconditioned installations.



VIRGINIA Refrigerants

ASK YOUR WHOLESALER OR WRITE

VIRGINIA SMELTING

COMPANY

WEST NORFOLK, VIRGINIA

PHILADELPHIA • NEW YORK • BOSTON

CHICAGO • DETROIT • ATLANTA

A TYPHOON
FRANCHISE
IS PROFIT INSURANCE
IN Air Conditioning

Air Conditioning Units
1 1/2-2 tons
Multi-Packaged Systems
Up to 60 tons
Prop-R-Temp Heat Pumps
2-20 tons
Evaporative Condensers
Packaged Water Chillers

TYPHOON AIR CONDITIONING CO., INC.
794 Union Street, Brooklyn 15, N. Y.

RESTAURANT EQUIPMENT

Electronic Service

Telautographs, Electric Eyes, Conveyor Belt Speed Service In Restaurant Catering to Business People

By C. Dale Mericle

ST. LOUIS—Newest development which has aroused wide interest in the restaurant and fountain field is the Fountron restaurant here, a place where orders are transmitted to the kitchen via Telautographs and foods are delivered to the waitresses at their stations behind the fountain on a moving belt automatically controlled by electric "eyes."

Novelty of this arrangement has attracted many customers and other restaurant operators, but its prime purpose is much more fundamental than that, explains the owner and creator of the idea—Sidney R. Baer, Jr., member of the board of directors of Stix, Baer & Fuller, one of the leading department stores in St. Louis.

"Fountron is the outgrowth of a desire to serve today's hurried businessman or career girl," said Baer. "The businessman, the career girl, and, in fact, all people who find themselves, at meal times, in a busy, heavily trafficked area with very little time to spare, usually rush through

the business of eating with resultant damage to digestion and disposition.

"We wanted to correct this situation by giving them speed without hurry. Our system of food handling with electronic controls, amazingly enough, employs only a few minutes of the customer's time in taking the order and delivering the food. The rest of the time is the customer's for purposes of comfortable eating."

"While we were designing the Fountron, we made fairly extensive investigations which revealed that most people in a restaurant or eating establishment of this type spend more waiting time than eating time. We have succeeded in arranging the procedure so that the business of taking the order, preparing the food in the kitchen and delivering it to the customer, piping hot in an individualized plastic cover, will at present take not more than five minutes of the customer's time.

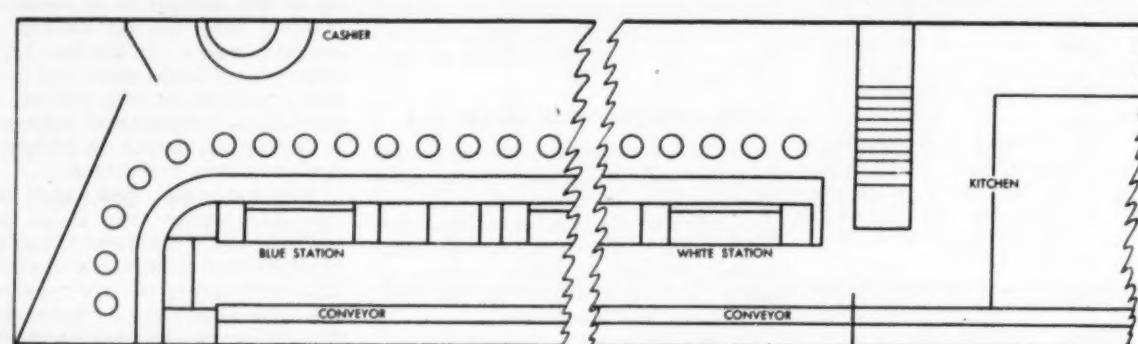
"Since the time consumed in serving the customer is decreasing daily, 15 minutes would probably be the



MOVING BELT at right controlled by electric eyes brings food from kitchen (and returns soiled dishes) at Fountron restaurant in St. Louis.



ORDERS received in kitchen via Telautograph are prepared and placed on moving belt.



maximum amount of time for each customer to occupy a place at the counter.

"Fountron is a composite of various features I had noted in interesting restaurants and eating places around the country, and its develop-

ment took many months of research and study on my part. As for the name itself, it occurred to me to combine the words 'fountain' and 'electronics,' which resulted in 'Fountron.'

Located in the heart of downtown St. Louis at 411 N. 8th St., the Fountron occupies a long, narrow store 17 ft. wide. Hub of the food service center is a 90-ft. long fountain which seats 44 persons.

The fountain is composed of four stations each served by one waitress and each having a color designation—red, blue, yellow, or white. Appliances and equipment at each station give each girl all the facilities of a complete fountain.

At each station there is a roll warmer, glass and serviceware storage, fountain, additional glass storage, and soup unit. The backbar equipment at each station includes a dessert display case, cup and saucer lowerators, and Telautograph sender unit. A tea dispenser and cereal display are shared by two stations.

CONVEYOR BELT RUNS BELOW BACKBAR LEVEL

The conveyor belt, which is about 1 ft. wide, runs directly in front of, and slightly below the level of the backbar.

When a customer gives an order to the waitress at the "blue" station, for example, the waitress turns to the Telautograph and writes the word "blue" and the order. A receiving unit in the kitchen (there's also a standby receiver there) reproduces the written message.

After the kitchen has completed the order, the plate is placed on the conveyor and covered with a blue plastic cover. When the conveyor has carried the order to the "blue" station, the electric eye at the station stops the conveyor. As soon as the waitress removes the plate, the conveyor starts moving again. In fact, it moves continuously except when stopped by one of the electric eyes.

ELECTRIC EYES RESPOND TO VARYING HEIGHTS OF COLORED COVERS

Although color codes are used, actually the electric eyes do not respond to the different colors. The colored covers differ in height and the electric eyes are set at different heights above the conveyor to correspond.

For example, the "white" station is nearest the kitchen, and the white covers and the electric eye at this station are at the highest level. Whenever an order with a white cover reaches this point, it interrupts the electric eye circuit and stops the belt.

The plastic covers of other colors are low enough to pass beneath the "white" station. There's about $\frac{1}{4}$ in. difference in height between the four types of covers.

Sanitation and good food at moderate prices are other keynotes of the Fountron operation. As it leaves the kitchen on the belt, for example, food passes under a 3-ft. length of ultraviolet ray lamps to sterilize it. Where the belt loops at the front end of the fountain to start its return trip,

it's sprayed with water. On the return to the kitchen it runs on a film of water about $\frac{1}{2}$ in. deep. The returning belt carries the soiled dishes, etc., back to the kitchen.

At the kitchen end, the belt passes through a detergent sanitizer solution in addition to the water spray.

Kitchen of the Fountron restaurant is also arranged to permit maximum speed and efficiency. The kitchen's service section, which is in duplicate, is nearest the fountain room and includes a sandwich-salad board with 12 stainless steel insets of varying sizes, two 4-slice toasters, shelving for plate storage, refrigerated supply station, hot meat pans, a reach-in refrigerator, vegetable containers, salad preparation unit, and sink.

A stove for individual hot orders, a deep fat fryer, a griddle, and sandwich grill are also readily available for food preparation here.

At the next station in the kitchen is the dishwashing section. Soiled dishes, silverware, etc., are returned here by the conveyor belt. Equipment

(Concluded on next page)



THE PICK OF THE PACKERS



Out where the West ends . . . many of the great meat packers use Worthington refrigeration machinery.

And all over the country, many famous restaurants—Toffenetti's in Times Square, Silver Fox Restaurant in Washington, The Century Room, Dallas—use Worthington air conditioning machinery.

This acceptance of Worthington

equipment is one of your biggest assets as a Worthington distributor—a powerful tool for your salesmen. Prospects are always impressed by "big names", especially the leaders in their particular field.

As a Worthington distributor you can handle any job with exactly the right equipment—because the Worthington line is the broadest line.

Worthington Corporation, formerly Worthington Pump and Machinery Corporation, Air Conditioning and Refrigeration Division, Harrison, New Jersey.

WORTHINGTON



AIR CONDITIONING AND REFRIGERATION

A Balanced Line...A Balanced Franchise

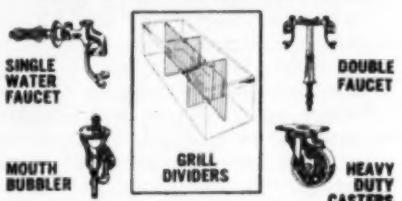
A.2.17

BEVCO



QUALITY COOLERS YOU CAN FIT INTO YOUR LINE AND SELL AT A PROFIT

ACCESSORIES



You sell quality, trouble-free cooling in these electric units that operate wet or dry. In 3 sizes . . . 4, 5, 6 ft. Unobstructed interiors. Baked Enamel finish for beauty and sanitation.

SEND FOR CATALOG N-1

The BEVCO Company, Inc.

3316-28 S BROADWAY • ST. LOUIS 18, MO.

Redmond

MICROMOTORS

Prompt shipment!

"ONE OR ONE THOUSAND"

74 different models in stock

FACTORY DISTRIBUTORS

CVCO-FREEZ CORP.
MARVIN L. "FERGIE" FERGESTAD
2120 S. Lyndale, Dept. A, Mpls. 5, Minn.

Electronic Service--

(Concluded from preceding page)
here includes a Salvajar unit for rinsing and an automatic dishwasher.

The chef's kitchen is in the rear and includes a large range with broiler, bake ovens, a fryer, scullery sink, work table, reach-in refrigerator, and the usual utensils.

Most of the kitchen and fountain equipment was installed by Southern Equipment Co. of St. Louis.

Air conditioning is also provided for the comfort of patrons and employees. A 15-ton Curtis compressor located in the basement connects to the coil and air-handling unit installed above the ceiling at the rear of the fountain section of the restaurant.

Ceiling itself is an attractive "egg crate" arrangement painted white to harmonize with the pastel gray which dominates. Murals in the modern style in each of the seven wall panels above the backbar depict different types of foods like salads, desserts, beverages, etc.

Along the opposite wall are three comfortable benches where patrons may wait until there's a vacant seat. Usually, they don't have to wait long, according to Richard W. Brown, manager.

"On week days we have fed nearly 400 people during the three-hour lunch period," he says.

With only 44 seats, that represents a turnover of about three per hour for every seat.

Rapid service provided by the electronic equipment and conveyor is almost wholly responsible for this, but psychology plays an important role, too. For example, coffee is not served piping hot, but at a more moderate temperature. Patrons don't have to wait until it's cooled off to drink it.

Ashtrays are conspicuous by their absence on the counter. If a patron lights up, the waitress will place one before the customer, but the management figures that the absence of the ashtray may keep customers from lingering too long after they've finished their meal and thus give a waiting patron their seat sooner.

Franchises for the establishment of similar restaurants in other areas are now being considered, according to Baer, the owner.

The franchise will include complete plans, specifications and installation service, menu consultation, as well as the rights to use the trademark and inventions involved," he said.

**LARKIN CEILING HUMI-TEMP**

Price is only one factor in the selection of any product—especially one that has so important a task as protecting valuable perishables. Performance must come first. Quality cannot be overlooked. Durability is highly important. Larkin has all of these. And Larkin has low prices, too. Compare them and see for yourself how low they are.

For the latest Larkin price list, see your wholesaler. If you wish, write direct to us. We shall be glad to send you one.

Manufacturers of the original Cross-Fin Coil • Humi-Temp Units • Frost-O-Trol Hot Gas Defroster • Evaporative Condensers • Cooling Towers • Air Conditioning Units and Coils • Direct Expansion Water Coolers • Heat Exchangers • Disseminator Pans.

WATCHDOG OF THE NATION'S FOOD SUPPLY
LARKIN COILS
519 MEMORIAL DR. S.E. • ATLANTA, GA.

For Those Without Cooling Towers**Kansas City Council Proposes Increase In Water Rate for Users of Air Conditioning**

KANSAS CITY, Mo.—A proposed average increase of 150% in water rates for individuals or firms here using air conditioning or refrigeration systems without water-conservation equipment brought opposition at a hearing before the fire and water committee of the City Council recently.

The city is considering an ordinance which would raise over-all water rates an average of 10% or approximately \$400,000 annually.

Asked whether businessmen would also oppose an ordinance prohibiting future installation of non-conserving air conditioning or refrigeration systems, downtown building owners replied that small businesses could not afford to install cooling towers on top of smaller buildings.

Such an ordinance would be a blow to business and an inconvenience to the public, emphasized Howard N. Barnum of Herbert V. Jones & Co.

The cost of converting air conditioning systems in four downtown buildings for water conservation was estimated at \$200,000 by their owner, Joseph A. Bruening, who reminded the City Council committee that the systems had been installed with the knowledge of the city water department.

Increase in his rates, this owner declared, would be from \$20,000 to \$60,000.

Another building owner told the committee that the city should stop selling water to companies or districts outside the city before it penalized taxpayers.

Rate increase was recommended by three engineering firms, Black & Veatch and Burns & McDonnell of

Miami's Seybold Building To Be York Air Conditioned

MIAMI, Fla.—The Hill-York Co. here has been awarded a \$250,000 contract for complete air conditioning of the downtown Seybold building. Work on the project is scheduled to begin immediately and to be completed within 12 months.

Officials said all floors from and including the second to the tenth, totaling approximately 93,000 sq. ft. of space, will be serviced by the air conditioning system.

The system to be used is based on circulating chilled water, it was stated.

This is the second quarter of a million dollar air conditioning job in a downtown Miami building to be announced in recent weeks. The first was for the Columbus hotel.

Trane Wins Third 'Oscar' For '52 Financial Report

NEW YORK CITY—In the final ratings of the independent board of judges in the "Financial World" survey of annual reports, The Trane Co. of La Crosse, Wis. was judged as having the best annual report of the air conditioning industry for the third year.

The bronze "Oscar of Industry" trophy will be presented to D. C. Minard, president of the company, at the annual awards banquet in the Grand Ballroom of the Hotel Statler on Oct. 28.

A total of 5,000 annual reports were considered this year in the international competition, the 12th in a series of surveys, and these were judged in 100 industry classifications for the "Best of Industry" awards.

In the air conditioning category, Carrier Corp. was runner-up for top honors, while York Corp. placed third.

PHOENIX — AIR CONDITIONING Capital of the World

Due to rapid growth of Phoenix, second fastest growing city in the U. S., and excellent acceptance of Carrier Air Conditioning, we are expanding our present business. Old established concern in community; Carrier Distributor in Phoenix since 1939. Want two (2) additional salesmen to sell unitary installations. Engineering or Air Conditioning background not required. Prefer men in thirties with previous sales experience. Provide sales training, draw and commissions, car allowance. Automobile required. Excellent opportunity in the Valley of the Sun. Contact:

Johnson Brothers Mfg. Co.
1845 E. Madison Street
Phoenix, Arizona

Gas Heating Controls

By Service Information Division,
White-Rodgers Electric Co.

24—How Liquid-Filled Safety Pilot Operates

Editor's Note: This is the 24th and last in the series of articles on gas heating controls prepared by the Service Information Div. of White-Rodgers Electric Co., St. Louis. The series began in the Aug. 4, 1952, issue of the NEWS. It was preceded by a similar series on Refrigeration Controls which ran in the weekly issues of the NEWS from March 24 through July 28, 1952.

Now in preparation is another series on oil heating controls. The first instalment will be published in the near future.

The liquid-filled pilot (see Fig. 22) is operated by the pressure developed by heating a liquid in a sealed element. The liquid that is used is mercury.

The thermal element is stainless steel and is connected to a stainless steel diaphragm and cap assembly by a stainless steel capillary. All of the element is impervious to the action of the sulphur found in normally used gas.

The diaphragm is secured to a junction box containing the switch mechanism. The distance between the switch box and the pilot burner assembly makes it possible to mount

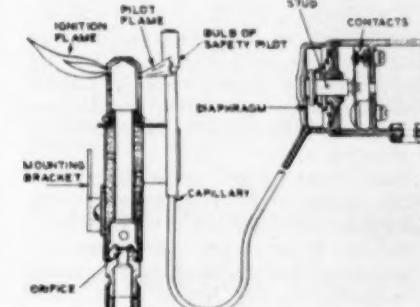


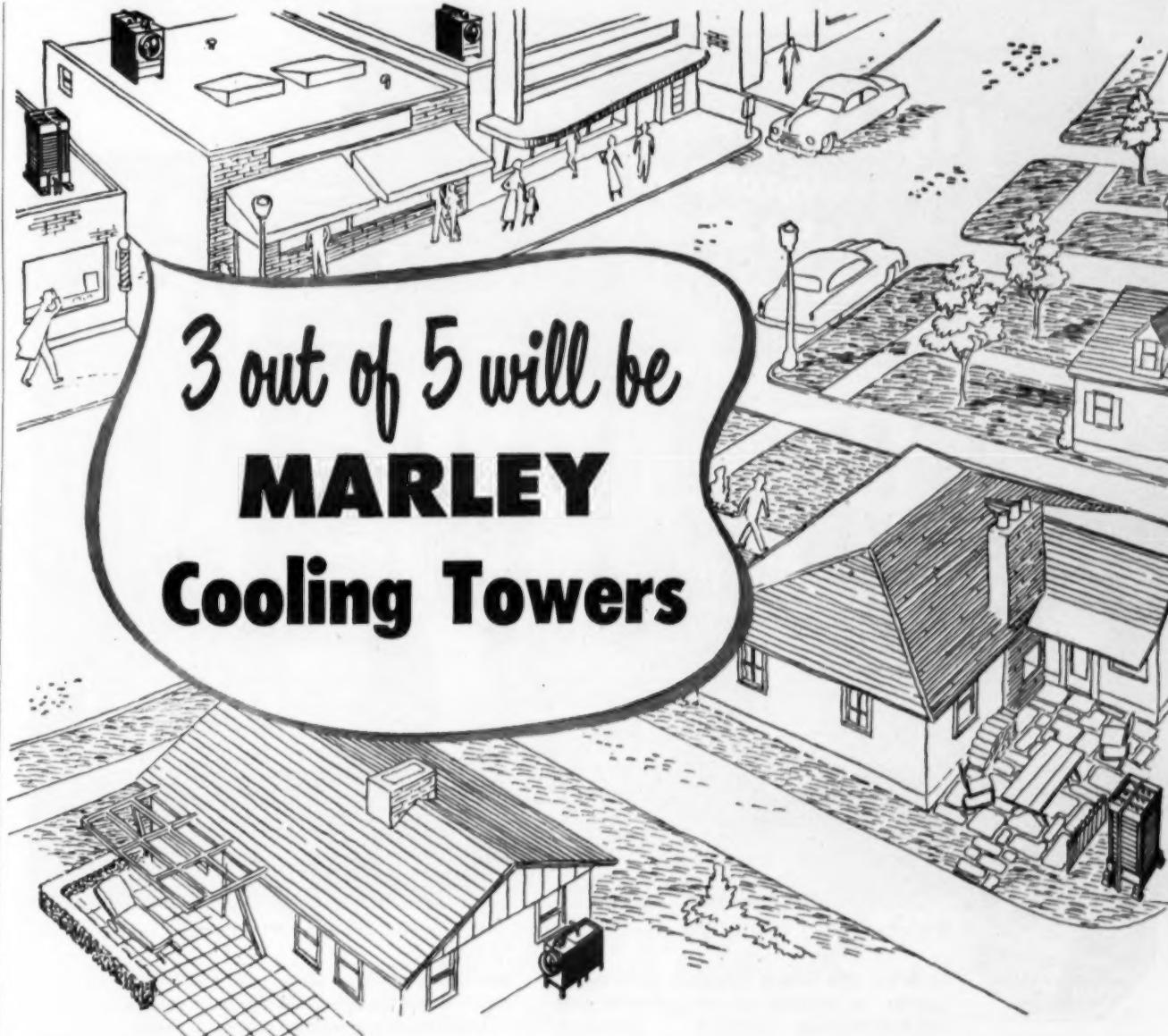
FIG. 22 shows operating mechanism of liquid-filled safety pilot.

the switch box outside of the heating unit.

Both the differential expansion and the liquid-filled pilots are of the recycling type. It is not necessary to set the pilots for operation by pushing a button or moving a lever. As long as the pilot is properly lighted no other action need be taken.

The liquid-filled pilot is available in combination with the solenoid valve. The two units can be separated if either unit becomes inoperative. Neither unit depends on the other for operation.

To separate the units, remove two screws holding the pilot switch case to the solenoid cap. Then, two wires from the solenoid can be removed from the terminals in the switch case.



Every reliable estimate points to an unprecedented market in 1953 for air conditioning — and a corresponding demand for cooling towers. Past experience, combined with current Marley production to meet this demand, indicates that in many cities, 3 out of every 5 towers sold will be Marley cooling towers.

This overwhelming preference for Marley stems from the fact that Marley towers are accepted as the standard of the air conditioning industry. This acceptance is a result of 25 years of Marley leadership and specialization in water cooling research and engineering . . . of the unique completeness of the Marley line . . . of ready availability from stocks in many cities . . . of guaranteed performance.

Even now, Marley is producing thousands of Aquatowers and natural draft towers to build up stocks in 30 cities. In making plans to capture your share of the market this year, you can count on an adequate supply and "over-the-counter" delivery of Marley towers, the cooling towers with built-in acceptance.

Visit our booth, No. 1043, at the A. S. H. & V. E. Show

The Marley Company

Kansas City 5, Missouri

Catalog Creates Customers

Contracting Firm Builds Steady Trade In Home Modernization Field
By Twice-a-Year Mailings to 40,000 Homeowners Looking for Ideas

BAYONNE, N. J. — Sales of air conditioners as well as domestic appliances have been stimulated by the issuance of a house catalog listing these items along with other household goods sold by Schultz Plumbing & Heating Co.

This organization maintains three retail stores in Hudson county, with headquarters here.

Schultz finds its printed "salesman" responsible for building up volume, principally in the home modernization market.

The catalog, consisting of 16 pages, 8 1/2 by 11 in., is so detailed a job that preliminary work for the two issues of the year, sent out in fall and spring, starts months ahead of press time.

Manufacturers' Catalogs

Supply Pictures

Manufacturers' catalogs are cut up to provide illustrations and product details. A rough layout is prepared by the office manager, Pete Meltzer, who sends it out for professional finishing of details.

The entire job is then lithographed in two colors to present a neat and attractive-looking brochure filled with information of interest to housewives and homeowners.

The mailing list of about 40,000 names is compiled from the Hudson county registry lists where owner-

ship and realty transfers are recorded. Reasoning behind this is that when a person moves into an existing dwelling, he is likely to be in a mood to improve it.

At this psychological moment he receives the catalog listing a variety of products he may want. The address and phone number of each of three stores are listed on each catalog page.

Mailing List Is Kept Up-to-Date

The mailing list is kept up-to-date by attaching the registry slip of each new owner to index cards kept in the front office. A corresponding stencil for each listing is racked up on filing cases in an adjacent stock room, where the mailing is done.

Although the bulk of the mailing is right after Labor Day and in late March, supplementary mailings are made throughout the year as new lists come in from the county registrar's office. At times this extra mailing comes to about 5,000 a week.

"We've found it more economical and practical to order new press runs from the existing catalog forms, rather than to rearrange the entire catalog for fill-in mailing periods," explained Meltzer.

Householders keep the catalog for months and do not ordinarily throw it away, it has been found.

Homeowner Keeps It Handy for Reference

Besides the usual product data, the catalog contains information useful to homeowners. For example, the entire second page is devoted to household hints and plumbing repairs.

"The main benefit we get from this effort," points out Edward Schultz, who with his brother, Milton, owns the business, "is that it enables us to sell a complete job instead of a single item at a time."

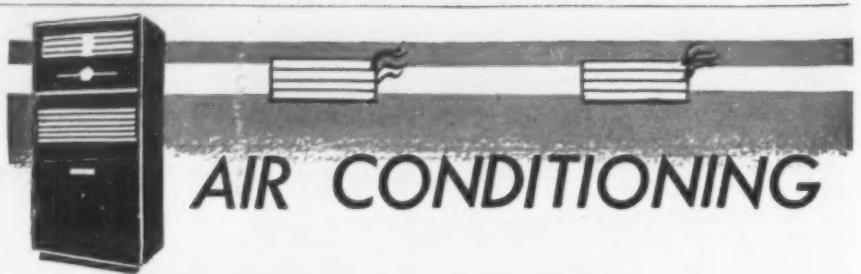
"With the catalog in front of them, people think of the whole line instead of selecting products one by one. It is this over-all view of our merchandise which is most beneficial."

Looks for the 'Fat Jobs'

Amplifying this viewpoint, Meltzer declared that the principal objective is to get what he calls "the fat jobs."

Here the company is not merely trying to create buying desire, but to cash in on pronounced purchasing trends, to reach a select consumer group in a concentrated house modernization area and to show what the dealer has to offer them before they start shopping around elsewhere.

How effective this policy has been is illustrated by a recent experience. The mailing piece reached a man who had just bought an existing dwelling



STOCKROOM serves as mailing department. Plates are fed into machine to print labels for the 40,000 customers on the Schultz' mailing list.

and was thinking of what he needed to improve it.

"Your circular just reached me in the nick of time," he later explained to the Schultz salesman at the store. "I was racking my brains figuring out what I wanted, and lo and behold, you laid it all out before me. That's real timing!"

That the expenses for the venture are well justified is further borne out by the results obtained.

"Here is why we realize we're coming out ahead," explains Milton Schultz.

"Supposing we gross at least 10 fat jobs from each 40,000 mailing (and this minimum has been reached time and again), this volume alone easily pays the freight. And besides we've succeeded in placing a reminder of our business before 40,000 potential buyers at the same time."

aid if our suppliers had the foresight to prepare billboard material so it could be conveniently changed and kept up-to-date by the dealers not only on trucks but in counter and window displays and other popular advertising media."

Installation work is carried out by a refrigeration specialist and six to 12 plumbers. Jobs requiring a skilled tile-setter and carpenter are farmed out.

The Schultz brothers took over the management of their father's business in 1948. That year their volume topped \$100,000 and the goal for 1952 was set at \$500,000. Milton heads the sales end, with Edward, a master plumber, in charge of mechanical operations.

Combines All Promotion In This One Package

Before issuing its present catalog, Schultz tried a variety of mailing pieces including postcards, manufacturers' literature, seasonally-timed letters, etc. But with the recent increase in postage rates, it was decided to combine all of this promotion into one large mailing effort.

"This may be a rough way to handle it since it's expensive and sometimes aggravating, but it's worth while," summarizes Meltzer, who carries out most of the production burdens.

To reach that part of the public which may not have received the circular, Schultz has tried billboard panel advertising on their five delivery trucks and the extra truck used for expediting work. These billboards, measuring about 3 1/2 by 7 ft., can be constantly changed by pasting up and replacing the ad copy which is mounted on masonite sheeting and metal on the truck bodies.

Billboard Material Becomes Obsolete

"The principal difficulty, however, is that the manufacturers are not giving us package poster sheets of the right size for this purpose," explains Edward Schultz.

"This could be a valuable dealer



RUDY

mild steel
EVAPORATORS
fit your needs exactly

Mild steel... simulated or tube-on-sheet types... galvanized... super finished... standard models... prompt service... low cost.

WRITE FOR DETAILS

RUDY Manufacturing Co.
 Specialists in
 Manufacturing Evaporators and Condensers
 DOWAGIAC, MICHIGAN

Be Smart... order from edition 157

HARRY ALTER'S DEPENDABOOK
 Fall and Winter, 1952-53

Over 9,000 Items!

REFRIGERATION
Parts and Supplies
 plus
 TELEVISION • RADIO • HEATING
 ELECTRIC MOTOR PARTS
 AIR CONDITIONING

Write for your copy—TODAY!

WHOLESALE ONLY

Service doesn't falter when it comes from Harry Alter

1723 S. MICHIGAN AVE.
 CHICAGO 16, ILL.
 134 LAFAYETTE ST.
 NEW YORK 13, N.Y.



Vilter Compressors, equipped with Allen-Bradley motor controls, installed at Morris Harvey College, Charleston, W. Va.

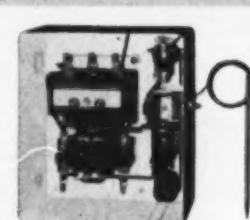
Why are Allen-Bradley automatic starters so popular for refrigeration and air-conditioning service? . . . Because they are trouble free.

Why are they trouble free? Only ONE moving part. No pivots, pins, or bearings to corrode or stick . . . no jumpers to break. You install them . . . and forget them! No contact maintenance . . . Allen-

Allen-Bradley Co., 1313 S. First St., Milwaukee 4, Wis.

Specify Allen-Bradley Standard Controls. For "Engineered" Special Refrigeration Controls—Consult with Allen-Bradley.

Allen-Bradley offers a wide line of air-conditioning and refrigeration controls—pressure and temperature controls, manual and automatic starters, and special refrigeration control units, consisting of various combinations of the above units.



A typical Allen-Bradley special refrigeration control unit. Note roomy enclosure.

WRITE
 for this
 Allen-Bradley
 Air Conditioning
 and Refrigeration
 Bulletin

ALLEN-BRADLEY QUALITY MOTOR CONTROLS

BULLETIN 836-837
 Allen-Bradley
 Company
 Milwaukee 4, Wisconsin



Cooling Towers and Evaps

Practical Advice on Locating, Installing, Maintaining, and Servicing
Offered by Edward Magnus of Snowhill Mfg. Co.

MIAMI, Fla.—"The average cooling tower or evaporative condenser will require about one to two hours attention per month; that is, if maintenance operations are performed regularly," declared Edward R. Magnus, chief engineer, Snowhill Mfg. Co., at the 15th annual convention of the Refrigeration Service Engineers Society here.

Magnus' talk covered points on the location, installation, maintenance, and service of cooling towers and evaporative condensers.

"From a natural element standpoint, it may be more desirable to put the tower inside the building; however, floor space inside the building may be quite valuable, and it is very uneconomical from a maintenance and service standpoint to locate the tower or condenser in a corner or in a small room where it is almost impossible to work on it," he cautioned.

Shape and Dimensions More Important Inside

"Shape and over-all dimensions play a more important part inside the building than they do outside. It may be possible that a square, squat type cooling tower or condenser will be easier to install and work on than a tall, slim tower or condenser; and, of course, the opposite may be true," Magnus said.

With a unit inside a building it is necessary "to make sure that the fan will not pump all of the heated air out of the building in winter-time. It is also necessary to locate the air discharge so that high velocity

air will not cause damage. This air, which sometimes contains water drift, may damage adjacent property or the clothing of people passing by, and even mar polished finishes on trucks and automobiles," he indicated.

Weight of a cooling tower or an evaporative condenser and the strength of the structure on which it is to rest are important factors that must also be considered in locating and installing these units, Magnus reminded the group.

Check To See If Floors or Roof Will Stand Weight

"When moving any heavy machinery over roofs or floors, you should be sure to determine that the floor or roof will carry the weight. In one instance, the roof in one section of a building where the evaporative condenser was to be installed was strong enough to support the condenser, but while the condenser was being moved over another section of the roof, the roof collapsed, doing much damage."

With respect to installation, Magnus advised giving "a great amount of thought" to eliminating vibration.

"Usually, new fans and new motors and their component pulleys and belts are well balanced and have very little vibration in connection with their operation; however, as foreign material collects on the fans and pulleys, and also as the pulleys wear, the entire unit will vibrate according to the severity of the impaired conditions," he said.

Paint Tower Before Putting Into Operation

Installers were also urged to paint a tower or evaporative condenser before it is put into operation since the original protective coating applied by the manufacturer is sometimes damaged during shipping and installation.

Location of the water pump should take into consideration the fact that (1) the packing will normally leak somewhat and (2) there is some noise and vibration created by the pump so that vibration eliminators may be advisable. Magnus commented.

"All pumps should have shut-off valves in the inlet supply line and in the outlet pipe line. These valves will pay for themselves the first time it is necessary to work on the pump. By closing the valves, it is possible to work on the pump with the least loss of water and the least loss of time. Adequate lighting should be installed directly over the pump. This is another time-saver in connection with maintenance and service."

Suggestions on Piping Offered

Several suggestions on piping were offered by Magnus:

"Unions and disconnecting flanges should be liberally used, and located wherever it may be necessary to disconnect piping."

"All ell's looking upward should be replaced with tees, and the open end of the tee should be closed with a short capped length of pipe. These make excellent drain-off connections and also form pockets for foreign material to collect in."

"On the long horizontal runs of piping, tees should be used instead of couplings. The side opening of the tee should point downwards, and a capped length of pipe used to close off the side opening."

This arrangement, Magnus explained, permits foreign materials, sludges, and acids to collect at the bottom of the legs, which can be more easily replaced than a full length of pipe.

"When a cooling tower or condenser is placed upon a roof, less problems are presented if the piping is passed horizontally through a vertical wall rather than going vertically through the roof. If it is necessary to go straight through the roof, a flange sleeve should be used around the piping" and "the space between the sleeve and piping filled with asphalt or any other waterproof material."

Need for Regular Maintenance Stressed

Importance of regular maintenance operations to prevent breakdowns and prolong the life of the equipment was stressed by Magnus.

The water pump motor should be oiled periodically with a good grade of winter-type automobile oil which won't deteriorate if it absorbs a little water or moisture.

Wick packings of the water pump motor should be replaced or washed with a good commercial oil solvent every three to six months.

If water pump packing leaks more than an occasional drop of water it can be tightened. Tighten both packing nuts simultaneously never more than $\frac{1}{16}$ of a turn at a time and allow at least half an hour interval before the second or subsequent tightenings. Pump packing, however, should be replaced every year.

Piping should be kept clean and painted, and whenever rust spots appear they should be wire brushed and painted.

Float valve washers should be replaced at least twice a year, and at the same time it would be wise to clean up the entire valve and its mechanism, Magnus declared.

Water Treating Should Start Early, Be Regular

Regarding water treatment, he stressed the point that "the success of any water-softening material or metal-cleaning material is in its early and regular use. After the interior parts of the cooling tower or condenser have been coated with various substances, such as lime and fly ash, etc., it is very difficult to remove it and generally very costly. Also, it will be found the metal underneath these materials has been attacked."

"Systematic water treatment will keep the water clean and prevent scale and algae, but if a water treatment program is not followed, it will help considerably if the water is drained periodically, once a week or once every two weeks, and replaced with fresh, clean water. Many cooling and tower and condenser manufacturers suggest that the float valves be adjusted so that a small amount of water will always trickle down the drain."

Regular Cleaning of Condenser Tubes

Because condenser tubes can become coated with alkali and other foreign material present in the water, they should be cleaned regularly. If this is done about twice a year, mild solutions made for this purpose can be employed.

"However, should the condensers not have been cleaned for a year or more, it will generally be found necessary to actually scrape the tube or to use abrasive materials," Magnus said.

He also suggests that fan bearings be watched closely for evidence of

wear since excessive wear of the fan bearing can ruin the shaft, fan, and fan housing as well.

Fan blades themselves require periodic cleaning with steel wool or wire brushes to remove dust and dirt that reduce fan efficiency and may make the fan unbalanced with resultant excessive vibration.

Housings of cooling towers and evaporative condensers also require attention. They should be kept painted and in good condition at all times.

Monthly cleaning of strainers and sludge accumulators is also recommended by Magnus.

Nelson's Promotion Tops Honeywell Plant Changes

MINNEAPOLIS—Stanley J. Nelson, for the last year assistant general superintendent of Minneapolis-Honeywell Regulator Co., has been promoted to factory manager in a series of production organization changes announced recently by Paul B. Wishart, vice president and general manager.

Wishart said the new appointments reflect increasing manufacturing activity and added responsibilities for the factory supervisory staff.

Jack G. Gentry, who since last year has been superintendent of the company's thermostat assembly plant, has been named to succeed Nelson as assistant general superintendent. Other changes include Ernest Buffington's promotion to superintendent of assembly and the promotion of Raymond Fries to superintendent of manufacturing.

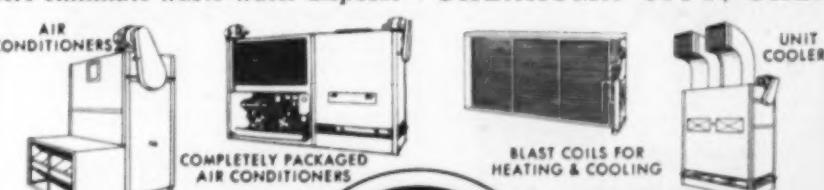
When water is a Headache...



problems and pumping costs. And they're engineered to give maximum efficiency and performance at a reasonable cost. Available in sizes from 3 to 100 tons.

Choose a Governair Evaporative Condenser and there's no need for aspirin!

GOVERNAIL CORPORATION, 513 N. BLACKWELDER, OKLAHOMA CITY, OKLA.



GOVERNAIL

ORIGINATORS OF COMPLETELY PACKAGED AIR CONDITIONERS



Now you can get PA-100, Davison's refrigeration grade silica gel in the pour spout can. With this can there is less chance of spilling the product and there is a minimum of moisture pick-up while can is open. When cap is replaced there is a positive seal assuring you of an active product at all times. And with the new pour spout you can get the same superior product that has always led all refrigerant drying agents. Unlike many refrigerant drying agents, PA-100 is completely inert... contains no corrosive compounds. In fact, PA-100 removes acids and corrosive compounds as well as water. Because PA-100 dries by physical absorption, not by chemical reaction, no corrosive salt or acid solutions are produced.

PA-100 is a hard granular material which will neither dust nor powder. PA-100 does not disintegrate or liquefy, never shrinks or swells in the system. PA-100 retains its particle size and shape indefinitely.

Get PA-100 in the new spout can today. For more information see your Davison Field Service Engineer or write

Progress through Chemistry

THE DAVISON CHEMICAL CORPORATION

Baltimore 3, Maryland

PRODUCERS OF: CATALYSTS, INORGANIC ACIDS, SUPERPHOSPHATES, PHOSPHATE ROCK, SILICA GELS, AND SILICOFLUORIDES. SOLE PRODUCERS OF DAVCO GRANULATED FERTILIZERS.

Refrigeration Problems and their solution

by Paul Reed

For Service and Installation Engineers



Paul Reed

Question on Calcium Chloride Brine

QUESTION

I have a tank that I wish to fill with 300 gals. of calcium chloride brine, which will test -40° F. I wish to mix this brine in small batches and then put it in the tank. I wish to know how many pounds of 77% flake calcium chloride to use per gallon, so that the tankful of brine will test -40° F. I have figured it out myself, but I am not sure that I am right.

ANSWER

The flake calcium chloride that you refer to as 77%, usually has a minimum purity of 77%, but may run somewhat higher—up to 88%. However, if you mix your brine in the following proportion, you will be on the safe side, for any variation in the strength of the calcium chloride will tend toward a stronger brine and with a lower freezing temperature.

A -40° brine (either Fahrenheit or Centigrade, for -40° F. is the same

temperature as -40° C.) is made by thoroughly mixing 3 lbs. 13 ozs. of 77-88% flake calcium chloride per gallon of water.

When mixing the calcium chloride with the water, stir the solution slowly until all of the calcium chloride is dissolved. If you mix 10 gals. of brine at a time, you will use 38 lbs., 2 ozs. of the flake calcium chloride per 10-gal. batch, and you will use a total of 1,144 lbs. for the 300 gals. of brine.

If you have not had experience with mixing or handling calcium chloride brine, you will be interested in the following information.

Calcium chloride is a very strong alkali, so protect your skin from it, for it will excessively dry your skin. Keep it off your leather shoes; it will ruin them by attacking the oil in the leather. Wear rubber boots or overshoes.

CALCIUM CHLORIDE BRINE HEATS WHEN MIXED

When the calcium chloride is added to the water, the solution becomes quite warm. Presumably, there will be refrigeration coils in your tank of brine; that is, evaporator coils. The tank of brine should be allowed to

cool to room temperature before the refrigerating equipment is started; otherwise, the suction and discharge pressures will be excessively high because of the warm brine, and the motor will be heavily overloaded.

After the brine is mixed, you can test it for strength and freezing point by the use of a hydrometer that reads in specific gravity, such as are used for testing storage batteries and automobile radiators.

However, the specific gravity of the solution varies with the temperature of the solution, so let the brine cool to 60° F., then test its strength with the hydrometer. If, at 60° F. it has a specific gravity of 1.27 or slightly more, its freezing temperature will be -40°. If the specific gravity is less than 1.27, the brine is not strong enough and will need more calcium chloride.

The following table shows the proportions of flake calcium chloride and water for brines of other freezing points. It is based on an average purity of the flake calcium chloride of 78.5%.

CHOOSE BRINE STRENGTH FOR COIL TEMPERATURE

It might be well to mention that the freezing point of the solution is to be chosen from the lowest temperature that the evaporator coils in the brine will become, not the average temperature of the brine itself; otherwise, the water will freeze out of the solution on to the cold coils. In other words, the brine must be strong enough to stand the cold evaporator coils, and not freeze on them.

The word "eutectic" is often used in connection with brines. If a salt, such as calcium chloride or sodium chloride (common salt) is mixed with water to form a brine, the temperature at which the brine freezes varies with the strength of the solution, that is, with the per cent of the salt in the brine.

The stronger the solution, the colder the brine must be before it freezes, down to a certain strength or "eutectic point." For calcium chloride brine that point is 29.6% pure calcium chloride by weight, and, of course, the remaining 70.4% water. At this strength, the brine has a specific gravity of 1.29 at 60° F. and a freezing or "eutectic temperature" of -59.8° F.

If we add more calcium chloride to this eutectic solution, it becomes

stronger, but its freezing temperature rises instead of going lower as we might expect. At 30%, the freezing point is up to -50.8° F.; at 32%, -19.5° F.; and at 34%, it is back up to 4.3° F., about the same as for an 18.5% solution.

For sodium chloride, the eutectic point is at 23% strength, specific gravity 1.175, and a eutectic temperature of -6° F. This is a solution of 2 1/4 lbs. of *pure* salt (slightly more, commercial grade) per gallon of water.

SPECIFIC HEAT OF BRINE

Brine does not have as great a heat capacity, or specific heat in B.t.u. per lb. per degree temperature change as water. In fact, as shown in Table I, your -40° brine is only about two thirds the specific heat as water.

This means that a given machine will cool your 300 gals. of brine much faster than if it were water. On the other hand, the brine in warming up, will not absorb as much heat as the same amount of water, that is, it will have less refrigeration hold-over than water.

York Names H. L. Zimmer Area Promotion Specialist

ST. LOUIS—In line with its new, expanded program of sales promotion assistance to distributors and dealers, York Corp. announced recently the appointment of Harold L. Zimmer as advertising and sales promotion specialist for the midwest district office at St. Louis.

Zimmer, a former reporter for the *St. Louis Globe Democrat* and later a member of the *St. Louis Star-Times* advertising department, has recently been engaged in industrial advertising and sales promotion work. He will work in St. Louis and in the field for York, developing factory-organized campaigns and programs.



R. R. SMITH



F. J. MEYER

Cutler-Hammer Appoints Two Division Managers

MILWAUKEE—Announcement is made by P. S. Jones, vice president in charge of sales, Cutler-Hammer, Inc., of the appointment of R. R. Smith as division manager, renewal parts sales.

Jones also announced the appointment of F. J. Meyer as division manager, heating device sales.

Smith joined Cutler-Hammer in 1921 as a member of the production department and in 1926 was transferred to the company's repair order department. In 1942 he became a member of the headquarters sales organization where he remained until his new appointment.

Meyer came to the company in 1949 upon graduating from the University of Wisconsin. He was appointed as a member of the company's headquarters sales department until 1951 when he assumed the responsibility as specialist in electric heating devices, a position he held until his present appointment.

McDonnell To Receive F. Paul Anderson Medal

NEW YORK CITY—Everett N. McDonnell, president of McDonnell & Miller, Inc., Chicago, has been selected to receive the 1952 F. Paul Anderson Medal of The American Society of Heating and Ventilating Engineers "for outstanding work in the field of heating, ventilating, and air conditioning," the society announced recently.

Formal presentation of the award will be made at the society's 59th annual meeting in Chicago on Jan. 28, by Ernest Szekely, ASHVE president.

The F. Paul Anderson Medal was established in 1930 by the late Thornton Lewis of Philadelphia, president of the ASHVE in 1929. Recipients of the award are selected by the council of the society.

A leader in the design and manufacture of safety devices for steam and hot water heating boilers and liquid level controls, and active in many groups concerned with facilities for heating and ventilating, McDonnell has been a prime influence in the development and expansion of the field.

PARTS JOBBERS

Servicemen can pick up Motors and ADAPTERS at your counter and carry them in their cars; service completed in one call, a distinct advantage. $\frac{1}{2}$ to $\frac{1}{2}$ hp.—101-D ADAPTERS also $\frac{1}{2}$ to 1 hp.—102-C help you sell 1 to 3 hp.—103-C allied items: Motors, Belts, Pulleys, etc.

Engineering Research Associates, Inc.
3475 East Nine-Mile Road
Hazel Park, Michigan

Freezing Temp. °F.	Approx. lbs. of 78.5% flake calcium chloride per gal. water	Specific Gravity at 60° F.	Specific Heat—B.t.u. per lb. per °F.
32	0 lbs. 0 oz.	1.000	1.00
30	0 " 4 "	1.020	.96
25	0 " 14 "	1.068	.89
20	1 " 5 "	1.100	.84
15	1 " 10 "	1.120	.80
10	2 " 0 "	1.155	.77
5	2 " 3 "	1.185	.75
0	2 " 8 "	1.185	.73
-5	2 " 10 "	1.195	.72
-10	2 " 14 "	1.215	.71
-15	3 " 1 "	1.225	.70
-20	3 " 4 "	1.235	.69
-30	3 " 9 "	1.255	.67
-40	3 " 13 "	1.270	.66
-50	3 " 15 "	1.280	.66
-59.8	4 " 0 "	1.290	.65

SAVE TIME by choosing the right Ranco Milk Cooler Control!

You can make more money, please more customers, on milk cooler service calls by standardizing on Ranco controls. See your wholesaler for the complete line of Ranco models for more than 4,000 applications on all types of domestic and commercial refrigeration, including air conditioning.



CHECK WITH RANCO FIRST!

RANCO
MILK
COOLER

Ranco Inc.
COLUMBUS 1, OHIO

WORLD'S LARGEST MANUFACTURER OF REFRIGERATION CONTROLS

Cut Country Mileage!



Crowds Attend Chicago Marts--

(Concluded from Page 1, Column 3) showing the greatest interest in deluxe and higher-priced models."

Freezers are still a "hot" item and some manufacturers report that they have been behind on orders for freezers for more than a year. The upright type, in larger sizes, predominates among the new models introduced at the markets.

Greatest increase in number of manufacturers of any one appliance would probably be a toss-up between room air conditioners and clothes dryers. The room air conditioner might win by a slight edge, as producers of all kinds and types of appliances have entered the field.

Newest entrants in the room conditioner field, with lines announced for the first time during the markets, are Victor Products Corp. and Quicfrez, Inc. (formerly Sanitary Refrigerator Co.).

Bendix Home Appliances was premiering its refrigerator, home freezer, and electric range models, marking its entrance into the field of appliances other than home laundry equipment.

With working models of its "Ice-maker" refrigerator and its "Wonderbar" portable refrigerator pretty much stealing its own show, Servel, Inc. showed its broad line of appliances, which it will introduce across the country soon.

A new room air conditioner and upright freezer, and crates marked "a line of laundry equipment to come soon" indicated Kelvinator's move towards a complete line of major appliances.

General Electric was showing its

new products in its new "major appliance headquarters" on the 11th floor of the Merchandise Mart, and drawing considerable attention to its XR-10 "experimental refrigerator of tomorrow."

Emphasis at Hotpoint was on its new dishwasher model, featuring complete washability, greater capacity, and greatly simplified installation; and on its improved clothes dryer.

Frigidaire showed a couple of new refrigerator models and its improved clothes dryer, but will make a bigger splash later in the month. Westinghouse, Admiral, and Crosley will introduce new appliance lines to the field sometime in the near future, and did not emphasize Mart showings.

There was little new on prices or pricing policy at the Markets. There seemed to be more increases than decreases, but actually most of these moves seemed to be merely an effort to get models into line with competition.

At the Merchandise Mart press conference on the opening day of the Markets, Hotpoint's President John C. Sharp declared that he foresaw no great changes likely in the appliance price structure in 1953, but that 1953 could be expected to be one of the most competitive years since the end of World War II. Because of this, he said, advertising and promotion budgets would probably be the largest in the history of the industry.

Servel Air Conditioning--

(Concluded from Page 1, Column 4) the firm planned to boost output of all air conditioning units 300% over 1952 production to meet the expected demand.

Gilbreath also unveiled two more major additions to Servel's 1953 air conditioning line and announced a substantial reduction in the price structure of the 3-ton residential unit.

The new products are a furniture-styled window-type room air conditioner—the "Wonderair"—and a 10-ton water chiller for industrial installations, a smaller version of the 25-ton model already available.

Gilbreath revealed that the company is backing its 1953 air conditioning line with a half-million-dollar advertising campaign, with heavy schedules set for both consumer and trade publication. Ross Roy of Detroit is the agency.

Tecumseh Policy--

(Concluded from Page 1, Column 4) to handle compressors on a repair and return basis.

In addition, other recognized jobbers will be appointed by Tecumseh district managers to handle parts only.

SMITH EXPLAINS PROGRAM

Smith issued the following explanation of Tecumseh's new program:

Tecumseh has never before offered its line of hermetics to jobbers selling only a limited line of conventional equipment through these channels.

With the purchase of the Universal Cooler Co. in 1950, which is now the Marion Div. of Tecumseh Products Co., and with better than 14,000,000 Tecumseh hermetics now in the field, a jobber program to serve the replacement market was definitely indicated.

The first step in this program was to consolidate the Marion and Tecumseh lines into one over-all line using the best items from both.

The Marion hermetics were discontinued and the much broader Tecumseh line of hermetics from $\frac{1}{2}$ to $1\frac{1}{2}$ hp. (except stub-tube jobs) substituted. Also the Marion conventional models A, TA, DD, and FF were replaced by the standard Tecumseh singles and twins in the $\frac{1}{2}$ to $1\frac{1}{2}$ hp. applications.

The Marion FFN and FFP pumps were designed to cover the $\frac{1}{2}$ and $\frac{3}{4}$ -hp. applications. In the 1 to 3-hp. range the Tecumseh 1200 and 1800 and the Marion K, M, and N were discontinued and a new series of four cylinder compressors designed for this range. For larger applications the Marion models P, R, and S were continued.

With this consolidation, Tecumseh can now offer the jobbers a compressor or unit to meet any refrigeration application up to 15 hp.

While Tecumseh had sold only conventional equipment to any recognized jobber, Marion, at the time of purchase, had about 160 "Authorized Wholesalers" handling their complete line.

It was felt that the variety and completeness of this new Tecumseh line warranted more adequate inventories in the field and better distribution.

'SELECTIVE WHOLESALERS'

Therefore, Tecumseh, through its district managers, decided to set up what we call "Selective Wholesalers" in as many trading areas as possible.

These "Selective Wholesalers" are appointed according to the need in the area by Tecumseh district managers who have complete control over the selection in their territory. They may select as many or as few as they believe the area will support economically.

The "Selective Wholesaler" may then supply the complete line of Tecumseh compressors and units as well as replacement parts to customers in his trading area. Also, only these wholesalers will be able to handle compressors on a repair and return basis.

In order to assure a stock of replacement parts (not including compressors), the district managers may also authorize other recognized jobbers to handle parts only for all Marion and Tecumseh equipment.

The Tecumseh Selective Wholesaler will also be able to supply parts and pumps for G-E commercial equipment up to 2 hp., in accordance with our recent arrangement with the General Electric Co.

At the present time, Tecumseh has appointed approximately 180 Selective Wholesalers in the U. S. and 18 in Canada. These outlets serve some 160 trading areas so that parts, pumps, and units can be purchased almost anywhere in the United States and Canada.

A full merchandising program is planned, including trade paper advertising, direct mail, sales aids, new cataloging, and other information to help the jobber sell the Tecumseh line.

Kronen Heads Lackawanna County Appliance Dealers

SCRANTON, Pa. — Sidney S. Kronen was elected president of the Lackawanna County Appliance, Radio and Television Dealers Association.

At a meeting in the Chamber of Commerce Building the association also elected the following officers: vice president, Paul Roche, and secretary-treasurer, Ernest Courtemanche.

Builders Will Hear About Year-Round Air Conditioning

CHICAGO — Two presentations on year-round residential air conditioning, "the feature of the future" will be made at the annual convention of the National Association of Home Builders in the Conrad Hilton hotel on Jan. 21 and 22.

The Air Conditioning and Refrigerating Machinery Association is sponsoring the presentations.

The first presentation will be a talk by J. F. Knoff, vice president and general sales manager of the Airtemp Div., Chrysler Corp. Knoff will cover the general aspects of year-round residential air conditioning, telling what it is, how it works, and its benefits to both builder and homeowner. He will speak at 2 p.m., Wednesday, Jan. 21.

At 10 a.m. on Thursday, a question and answer period will be staged under the direction of discussion leader R. G. Hughes of Pampa, Texas.

To start off the discussion, A. E. Melling of Carrier Corp. will tell what year-round residential air conditioning does, Sam Levine of General Electric Co. will tell what with, Keith T. Davis of Bryant Div. of Affiliated Gas Equipment Co. will discuss with what, and J. A. Gilbreath of Servel, Inc. will tell how much.

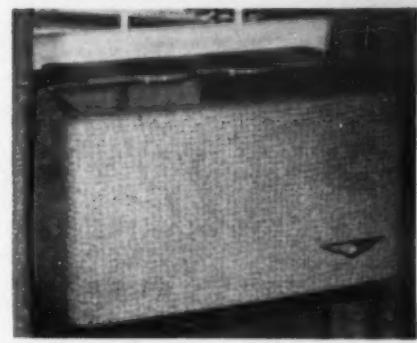
Life Insurance Going to FOA Customer Members

NEW YORK CITY — The Freezer Owners Association, which supplies frozen food to freezer owners at reduced prices, announced that from now on its national membership in the FOA plan will be the recipient of a special life insurance.

According to John Bess, founder of the plan, every FOA consumer member will receive life insurance to the tune of one year's supply of food, should the provider of the home die.

Miller Handles Westinghouse Air Conditioner Line in Omaha

OMAHA, Neb. — The Henry W. Miller Electric Co. of Omaha has been named local dealer for Westinghouse self-contained air conditioning equipment.



"DECORATOR" model included in the new International Harvester room cooler line. Owner can change the fabric in a few minutes to match draperies or floor coverings.

Harvester Coolers--

(Concluded from Page 1, Column 5) and L-750) have air intakes at the bottom of the unit and two circular, adjustable grilles at the top for air outlet. The $\frac{1}{2}$ -hp. unit (L-350) has air intakes on the side and an across-the-top outlet.

The fan motors on all three units are in the part of the shell that is outside the building, thus reducing the heat and creating a quieter operation.

The $\frac{1}{2}$ and $\frac{3}{4}$ -hp. units have outside air dampers to control the outside air coming into the room. All three models can be fan operated for circulating air without cooling.

Exteriors of the air conditioners have been rustproofed, even down to stainless steel screws, in order to eliminate rust-streaking of buildings.

All models operate on a.c. current, 115 volts. An additional model, L-751, $\frac{3}{4}$ hp., is available for 230-volt operation.

Harvester's new L-24 dehumidifier has a capacity to remove 12 qts. of water a day. It utilizes a $\frac{1}{6}$ -hp. compressor unit.

'53 Restaurant Show Set For May 11-15 In Chicago

CHICAGO — The 34th annual National Restaurant Convention and Exposition will be held May 11-15, 1953, at the Navy Pier here, it was announced recently by the National Restaurant Association.

The 1953 show "already exceeds in size the show held last spring, with reservations for exhibit space still coming in each week," the association said.

BETTER COOLING
with
Taco
"CONTROLLED VELOCITY" CHILLERS

1. Improved heat transfer
2. Rapid response to Thermal Expansion Valve
3. No oillogging and slop over

Because...
Taco's "Controlled Velocity" Tube Bundles...
Carry all incoming liquid to the top of the Chiller in the first pass.
Provide constant forward movement of all refrigerant and oil.
Prevent accumulation of liquid (refrigerant or oil) in any part of the Chiller.

And because...
Taco's "Controlled Velocity" Heads...
Agitate oil and liquid refrigerant, at each head pass, with a constant stream of expanding gas.
Provide unretarded flow of refrigerant.
Eliminate "traps" for oil and liquid refrigerant.

Taco
For full information and Taco's "pin-point" Selection Charts, write for Bulletin CWF.

137 SOUTH STREET PROVIDENCE 3, R. I.

DEMONSTRATING THE DEPENDABILITY OF



EQUIPMENT

The portable steam engine shown above was operated in Virginia from 1872 to 1949;

the Corliss type below, built in 1891, is still running at Irwin, Penna.

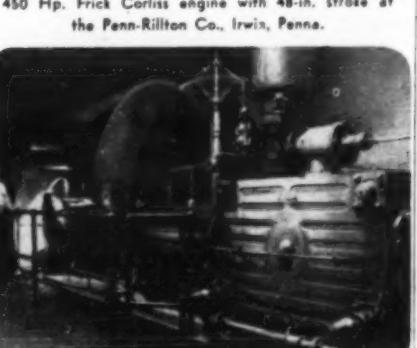
Another Frick Corliss, shipped in 1888, is still going strong at Weldon, N. C.

Frick Company was established a century ago for making engines and farm machinery. For over 70 years it has pioneered in building refrigerating and air conditioning systems. Frick compressors commonly achieve service records of 40 years; many have run 50; some even 60!

The whole story of Frick equipment is told, with 200 illustrations, in the Centennial History just published: send \$1 for your copy. And get estimates now on the cooling system you need.

FRICK & CO.
Waynesboro, Penna.
Also Builders of Power Farming and Sawmill Machinery

450 Hp. Frick Corliss engine with 48-in. stroke at the Penn-Rillton Co., Irwin, Penna.



Fogel Arranges Series of Regional Sales Meetings During First 6 Months

PHILADELPHIA — A series of regional dealers sales meetings will be staged throughout the country during the first six months of the year as part of the Fogel Refrigerator Co.'s 1953 sales program. E. A. Terhune, vice president in charge of sales, is the agency.

The program will be launched at the factory on Jan. 23 and 24 when 10 district managers will meet with factory officials here. This meeting will include an inspection of the plant by the field representatives, presentation of new 1953 models, and a discussion of the sales program, Terhune said.

On Feb. 25, another meeting will be held in the southeast. Location for this meeting will be announced soon, Terhune said.

On March 30, a meeting will be held in Chicago followed by a meeting in St. Louis on April 1. The New York City conference will be staged on Wednesday, April 22 to coincide with the Frozen Foods Exposition at Grand Central Palace. Dealers from New England, New York, New Jersey, and eastern Pennsylvania are expected to attend.

On May 20, a meeting is slated for Pittsburgh. During the week of June 15 a final group of meetings will be held in Detroit, Cleveland, and Cincinnati.

Kronen Heads Lackawanna County Appliance Dealers

SCRANTON, Pa. — Sidney S. Kronen was elected president of the Lackawanna County Appliance, Radio and Television Dealers Association.

At a meeting in the Chamber of Commerce Building the association also elected the following officers: vice president, Paul Roche, and secretary-treasurer, Ernest Courtemanche.

PATENTS

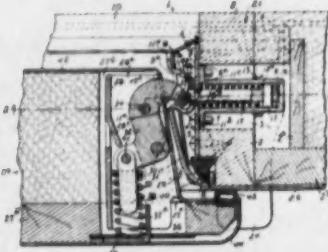
Week of October 14
(Concluded)

2,613,818. REFRIGERATOR SHELF.
William E. Richard, Evansville, Ind., assignor to Seeger Refrigerator Co., a corporation of St. Paul, Minn., a corporation of Minnesota.



In a sanitary refrigerator shelf, an integral substantially rectangular sheet metal member having an upper plane surface bordered on its front, rear and both sides by a depending border flange extending downward at substantially right angles to said upper surface, said member having its upper surface provided with a multiplicity of slots of uniform width and length extending from a point near the front border flange to a point near the rear border flange, said slots being separated by parallel plane portions of said member of uniform width, and said slots having depending border flanges on each side of said slots, extending substantially the full length of said slots, and a front retaining and finishing bar carried by said front depending border flange and having a plane top surface, a rear plane surface attached to the front border flange and being co-extensive therewith, a rearwardly extending upper rib joining the plane top surface and rear plane surface and overlapping the crack between said bar and said front border flange, said bar being tapered above and below toward a front edge surface, said bar comprising a channelled sheet metal member open at its bottom rear portion thus providing a space between said front edge surface and said rear plane surface and being secured to said front border flange by a plurality of rivets extending longitudinally through said front border flange and said rear plane surface, whereby said bar conceals said rivets from the top and the front of said shelf.

2,613,973. REFRIGERATOR DOOR LOCKING AND OPENING MECHANISM.
Paul H. Brinkster, San Antonio, Tex., assignor to Ed. Friedrich, Inc., San Antonio, Tex., a corporation of Texas.



In a refrigerator, comprising a door frame, and a door for said frame having an outer wall, a strike mounted on said door frame, a push rod mounted in said door frame and adapted to be projected through said strike, a catch pivoted at one end to said door and having at the other end thereof a hooked end, a guide pin pivotally connected to the pivotal end of said catch and extending toward said door outer wall, a spring encircling said pin and interposed between said door outer wall and said catch pivoted end, said spring normally urging said hooked end into engagement with said strike when said door is in closed position, and means for operating said push rod for projecting it against said hooked end of said catch to pivot said catch and disengage said hooked

NOW . . . all the coils you need . . . when you want them at the right price!

Your coil requirements can be easily handled in our well-equipped plant. Since we primarily manufacture heating coils, we're in an excellent position to handle your cooling coil requirements during your busy season!

Send us your drawings, and tell us quantities and timing necessary—we'll be happy to quote on your coil requirements. No obligation, of course. Address BOX 4191, Air Conditioning & Refrigeration News.

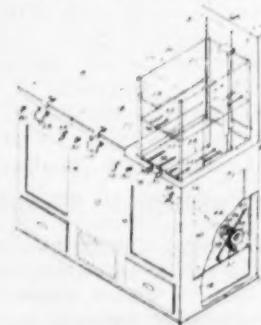
end from said strike and simultaneously compressing said spring against said door outer wall for urging said door to open position.

2,613,838. REFRIGERATOR CABINET.
Robert A. King, Erie, Pa., assignor to General Electric Co., a corporation of New York.



1. In a refrigerator cabinet, an outer wall and an inner wall mounted in spaced relationship, said walls terminating in spaced free edge portions, spacing means secured to said walls for maintaining the spaced alignment of said edge portions of said walls, a readily detachable breaker strip for closing the space between said walls and enclosing said free edge portions of said walls, resilient means secured to one of said walls inwardly of the edge portion thereof and engaging one edge of said breaker strip for retaining said breaker strip in position, said breaker strip being formed with a concave portion adjacent said one edge thereof and enclosing said one edge portion of said one of said walls, and means including a portion of said spacing means extending toward said concave portion of said breaker strip and arranged to engage said concave portion while said one edge of said breaker strip is in engagement with said resilient means to prevent disengagement of said breaker strip from said resilient means.

2,614,080. SHELF ELEVATING MECHANISM AND CONTROL.
Douglas Col-
lins, Salisbury, N. C.



1. In a refrigerator, walls defining an open-top compartment, a storage rack assembly, guide rotating said shaft in said one direction to elevate said rack assembly, manually releasable brake means normally effective in all vertical positions of said assembly to arrest movement thereof by preventing the rotation of said shaft by said power means in said one direction and operative when released to permit rotation of said shaft in said one direction, control means for releasing said brake means, and a one-way connection between said brake means and said shaft normally permitting rotation of said shaft in an opposite direction upon the application of lowering force to said assembly in excess of the elevating power of said power means, whereby said rack assembly may be stopped in any of an infinite number of positions in its upward movement by the brake means under control of said control means and said rack assembly may also be stopped in any of an infinite number of positions in its movement in a downward direction by said brake means independently of the control means upon the cessation of the application of a lowering force sufficient to overcome the elevating power of the power means.

**2,614,021. REFRIGERATING APPAR-
TUS.** Whitney Giffard, Detroit, Mich., assignor to Nash-Kelvinator Corp., Detroit, Mich., a corporation of Maryland. Application June 26, 1947, Serial No. 757,017. 1 Claim. (U.S. 312—315.)



In a refrigerating apparatus, a cabinet heat breaker strip around a corner of an

Subscribe Now

Receive the greatest trade paper in the Industry—AIR CONDITIONING & REFRIGERATION NEWS. Published every week. Brings you latest news and vital information on household refrigeration, commercial refrigeration, air conditioning, home freezers; manufacturing, distributing, retailing, servicing, and contracting. Only \$5 per year, 52 issues.

Fill in coupon and mail today

AIR CONDITIONING & REFRIGERATION NEWS
450 West Fort Street, Detroit 26, Michigan

Gentlemen: Send the NEWS for one year.

\$5 enclosed Bill me Bill the company

Name

Company

Street

City Zone State

1-12-53



Government Contracts

Deposit on plans \$20 payable U. S. Treasurer

NATIONAL ADVISORY COMMITTEE FOR AERONAUTICS

Description	Quantity	Reference	App. Bid	No.	Date
National Advisory Committee For Aeronautics, Lewis Flight Propulsion Laboratory, 21000 Brookpark, Cleveland, Ohio	Services Material for Alternations Additions to Ammonia Refrigeration System, Engine Research Building.	Job	C-3737	13 Jan 53	

CONTRACTS AWARDED THROUGH DEC. 31

Description	Quantity	Invitation No.	Opening Date
District Engineer, Tulsa District, Corps of Engineers, Tulsa, Oklahoma	Construction of Addition to Refrigerated Warehouse, Altus Air Force Base, Altus, Oklahoma.	Job (ENG-53-16 B)	26 Jan 53
Officer In Charge Of Construction, Ninth Naval District, Building 1-A, Great Lakes, Illinois	Construction of one-story brick Job building, with attached 5-story control tower, includes plumbing, heating, electrical can air conditioning. Work located at Naval Air Station, Denver, Colo.	29456	20 Jan 53

DEPARTMENT OF DEFENSE

Description	Quantity	Invitation No.	Opening Date
District Engineer, Tulsa District, Corps of Engineers, Tulsa, Oklahoma	Construction of Addition to Refrigerated Warehouse, Altus Air Force Base, Altus, Oklahoma.	Job (ENG-53-16 B)	26 Jan 53
Officer In Charge Of Construction, Ninth Naval District, Building 1-A, Great Lakes, Illinois	Construction of one-story brick Job building, with attached 5-story control tower, includes plumbing, heating, electrical can air conditioning. Work located at Naval Air Station, Denver, Colo.	29456	20 Jan 53

access opening to the cabinet, a pair of vertically spaced recesses in the outer face of said heat breaker strip, hinge butts on said breaker strip formed by and at each of said recesses, said hinge butts joining the recessed wall to the heat breaker strip proper behind the latter and having apertures, a pair of vertically spaced pintles respectively received and rotatable in said apertures, a pair of torsion springs having ends respectively attached to said rotatable pintles and their other ends anchored to said heat breaker strip between said recesses, said springs acting to rotate said pintles, a door to close said access opening having a pair of hinge butts disposed rearwardly thereof respectively engaging in said recesses and apertures to receive said pintles, and means locking said door butts to said pintles and held in locked position by said springs.

NPA Official Believes
Durable Goods Sales May
Rise 10 to 15% In '53

WASHINGTON, D. C.—A government official believes 1953 sales of consumer durable goods may rise 10 to 15% compared with 1952.

The official, G. Harrison Echols, director of the National Production Authority's consumer durable goods division, said he based his estimate on increased materials for consumer goods, absorption of finished goods inventories, and current extensive buying power created by high employment nationally.

He asserted that a "potent sales factor" in 1953 should be "the disappearance of once-heavy inventories in many products."

Echols pointed out that preliminary reports indicate that retail stores' inventories of appliance and furniture dropped from \$1,814,000,000 in December, 1950, to \$1,664,000,000 in September, 1952.

He further noted that manufacturers' stocks of household washing machines declined from 304,344 units on March 30, 1952, to 153,627 by Sept. 30, and that inventories of household refrigerators also decreased substantially.

Gas range inventories, normally 30 to 45 days of production, were running at only 13 days by the beginning of October, 1952, he added.

"In fact," Echols declared, "manufacturers have told us this fall that customers are mailing in new-purchase warranty cards for cooking ranges and refrigerators faster than factories are shipping inventory replacements, and home freezers are also continuing their quick-selling pace."

Echols said 1952 was a better production year for the civilian goods industries than seemed possible at the beginning.

He further stated that a manufacturing trend noted during the year was toward larger and more expensive models, despite materials limitations. He cited the popularity of combination refrigerators-freezers and automatic washing machines.

Johnstown Area Gets First
Drive-In Appliance Store

JOHNSTOWN, Pa.—SMS, Inc., the first drive-in appliance store in this area, has been opened at Geistown. William Snowden, Veto Morrell, and Jack Speicher are partners in the new firm. All are veterans of the appliance trade in the Johnstown district.

CLASSIFIED ADVERTISING

RATES for "Positions Wanted" \$5.00 per insertion. Limit 50 words. 10¢ per word over 50.

RATES for all other classifications \$7.50 per insertion. Limit 50 words. 15¢ per word over 50.

ADVERTISEMENTS set in usual classified style. Box addresses count as five words, other addresses by actual word count. Please send payment with order.

POSITIONS WANTED

BUSINESS AND Sales Management executive interested in position with well established Corporation or Company. 18 years extensive experience with large and small corporations in the commercial refrigeration, air conditioning and heating industry. National acquaintance with distributors, wholesalers and sales representatives. Specialist in creation and business volume development of sales organizations; business management. Prime qualifications: Aggressive, action, integrity, self starter, a leader not a follower, ability to influence and get along with people and business capacity. Remuneration must be in accordance to abilities and experience. Write BOX 4183, Air Conditioning & Refrigeration News.

POSITIONS AVAILABLE

MANUFACTURER'S REPRESENTATIVES wanted. Complete line refrigerated store fixtures, including latest design self-service models for supermarkets; also bakery refrigerators. Contact dealers, distributors and food chains. Our sales program for 1953 provides for the establishment of representatives in several desirable territories. Attractive proposal. Give complete details as to experience and territory can cover in first letter; also, industry references. FEDERAL REFRIGERATOR MFG. CO., P. O. Box 465, Waukesha, Wisconsin.

SERVICE ENGINEER

experienced in all phases of commercial refrigeration and air conditioning, now operating own successful business for past eight years in midwest, available in several months as service manager or service engineer. Due to wife's health must relocate in Los Angeles or southwest area. Would also consider Hawaii or South America. Available at any time for interview. BOX 4190, Air Conditioning & Refrigeration News.

POSITIONS AVAILABLE

MANUFACTURER'S REPRESENTATIVES wanted. Complete line refrigerated store fixtures, including latest design self-service models for supermarkets; also bakery refrigerators. Contact dealers, distributors and food chains. Our sales program for 1953 provides for the establishment of representatives in several desirable territories. Attractive proposal. Give complete details as to experience and territory can cover in first letter; also, industry references. FEDERAL REFRIGERATOR MFG. CO., P. O. Box 465, Waukesha, Wisconsin.

WANTED—AGGRESSIVE young man to sell Commercial refrigeration in Wisconsin.

Attractive compensation set-up. Sell name brands like Frigidaire. Opportunity unlimited. Located in good industrial part of State. State age, and selling experience if any. Position available now. BOX 4172, Air Conditioning & Refrigeration News.

REFRIGERATION ENGINEER

Established West Coast manufacturer of heating equipment is entering the Air Conditioning field and needs engineer to take charge of development of refrigeration equipment. Want man with extensive experience in design development and production of Self Contained Units or all year conditioners. Permanent position with progressive company. Give resume of education and experience and salary required. BOX 4187, Air Conditioning & Refrigeration News.

REFRIGERATION WHOLESALE

in large Eastern Seaboard city has position

available for an experienced inside man now employed in this capacity who is seeking an increase in income and opportunity. Please give detailed information of experience, salary, etc. Write to BOX 4189, Air Conditioning & Refrigeration News.

REFRIGERATION ENGINEER wanted. Detroit area freezer manufacturer of nationally known product needs qualified product engineer with knowledge of low temperature applications to head engineering department. Must be familiar with cabinet and system design. Excellent salary to man who qualifies. Our employees know of this ad. BOX 4193, Air Conditioning & Refrigeration News.

ENGINEER, AIR CONDITIONING, who wants to combine sales work with engineering, in selling and designing complete systems. Installation supervision not necessary. Offers exceptionally pleasant working conditions in dividing time between inside and outside work, plus satisfaction of seeing each job completed. Established Carrier distributor, midwest city. Prefer young man looking for opportunity to advance. Personal interview arranged at our expense. Write full details about yourself, which will be respected as confidential. BOX 4194, Air Conditioning & Refrigeration News.

EQUIPMENT FOR SALE

PROMINENT BRAND oil fired hot water heaters below factory costs. Six 20-gallon—NEW—\$37.00 each. Three 30-gallon—NEW—\$49.50 each. Four 30-gallon Floor models, \$27.00 each. One 45-gallon Floor model, \$39.00 each. For the Lot \$495.00. AIR ACCESSORIES, INC., 1400 Henderson St., Fort Worth, Texas.

REFRIGERATOR DOORS. 3'6" by 6'6" double batten auto close doors complete with removable track heads for a 7'2" track. 1½" corkboard insulation, 16 gauge metal clad. Brand new. \$95.00 each. Freight prepaid in U.S. Door height will be altered for anything up to 11 ft. 2 in. track for \$15.00 additional. BIMEL CO., Cincinnati, Ohio.

BRAND NEW 1953 frozen food merchandisers original crates. Model FDS18A. 18 cu. ft. thermopane doors; ultra modern superstructure; Kelvinator unit, 5-year warranty. Factory list \$733.50, your cost \$371.00. Order immediately; send for illustrations. MANN REFRIGERATION SUPPLIES CO., 440 Lafayette Street, New York 3, N. Y.

BOTTLE WATER coolers—Beautiful new modern styled, current production. Also available with refrigerated compartment. Compact, sturdy. Uses ½ H. P. Tecumseh Hermetic; Condenser fan. Year guarantee, additional four years available. Construction, performance, appearance equal any cooler on the market. In quantities of 25: each \$99.95, or, with compartment, \$129.80. Smaller quantities slightly higher. REMCOR PRODUCTS COMPANY, 321 E. Grand Avenue, Chicago, Illinois, Superior 7-4004.

ATTENTION SERVICEMEN—Send for new catalog—on controls, valves, relays, brass fittings, V-belts—hermetic and open type units. All new merchandise at great savings up to 50%; sold on money back guarantee. WALTER W. STARR REFRIGERATION, 2833 Lincoln Ave., Chicago 13, Illinois.

ARE YOU CHANGING YOUR ADDRESS?

If you are planning to move or want the NEWS sent to a different address, please use this coupon. Saves time and assures you uninterrupted service. Copy old address from NEWS wrapper if possible.

Old address:	New address:
name	name
company	company
address	address
city	city
zone	zone
state	state

My business is: This information helps us to make the NEWS serve you better.

Send to: AIR CONDITIONING & REFRIGERATION NEWS, 450 W. Fort St., Detroit 26, Mich.



NO BURNING or scorching of foods with new Westinghouse range surface unit, available on double oven Commander model.

Westinghouse Line for 1953--

(Concluded from Page 1)
leased on 1953 models of the company's electric ranges, refrigerators, freezers, dishwashers, water heaters, and a combination 115-230-volt electric clothes dryer.

The new models will be released for national distribution following the dealer preview meetings to be held between Jan. 15 and Feb. 9. It is expected that all new models will be available nationally by the end of the first quarter.

Suggested retail prices are expected to be maintained at levels comparable to 1952 prices. New models in the Westinghouse line will be competitively priced, Sargent said.

Besides the two-door refrigerator-freezer, the company introduced four single door refrigerator-freezers with automatic defrosting and two con-

ventional refrigerators. All models have horizontal type freezer chests.

All models provide individual temperature controls for the freezers and food compartments to insure proper cold in these sections, according to G. H. Meilinger, manager of the household refrigerator and home freezer department.

On the two-door combination refrigerator-freezer, the control dial in both the freezer and refrigerator compartment can be set for desired temperatures and once set, control of these temperatures is completely automatic regardless of changes in room temperatures, it was stated.

ROLL-OUT SHELVES

Roll-out shelves are in the new two-door refrigerator-freezer and three other "Frost Free" models. All seven models have adjustable shelves and a lift-out shelf for storage flexibility.

All models have "Humidrawers" for moist cold storage of vegetables. The shelves in the door are called "Snack Racks." They will hold many items such as eggs, dairy products, beverage bottles, small glasses, and cans. Five models have "Meat Keepers" and "Butter Keepers."

The 1953 line of Westinghouse refrigerator-freezers are color styled in "Arctic Blue" on the inner door panels and cabinet breaker strips. This color is also carried out on the fronts of "Freeze Chest," Meat Keepers, and Humidrawers. Shelves on Snack Racks are white and on some refrigerator-freezer models they are gold trimmed. The exterior styling of all models is highlighted by long doors.

"All the new models," Meilinger commented, "offer more refrigeration in less floor space and larger freezer capacities which range from 28 to 77 lbs. of frozen food storage. The new 8-cu. ft. refrigerator, with over 16 sq. ft. of shelf area, is only 24-in. wide and takes up a minimum of floor space for this much storage capacity."

The two-door combination refrigerator-freezer, the TFE-114, he said, is the first to offer automatic defrosting and automatic temperature control for both the freezer and the refrigerator compartment.

MAGIC DOOR OPENER

An electrically-operated "Magic Door Opener" is used on two 1953 Frost Free automatic defrosting combination refrigerator-freezers, the 12-cu. ft. DFE-12 and the 10-cu. ft. DFE-10.

On these models, the conventional door handle is replaced by a touch plate that operates the electrically-controlled latch mechanism that makes the door automatically swing open. To operate the opener, only a slight pressure from the back of the hand, elbow, or finger tips is needed. This action leaves the hands free to put foods in or take them out of the refrigerator.

An 8.4-cu. ft. deluxe Frost Free automatic defrosting refrigerator, the DFE-84, was announced. It is similar in appearance and styling to the DFE-12 and DFE-10.

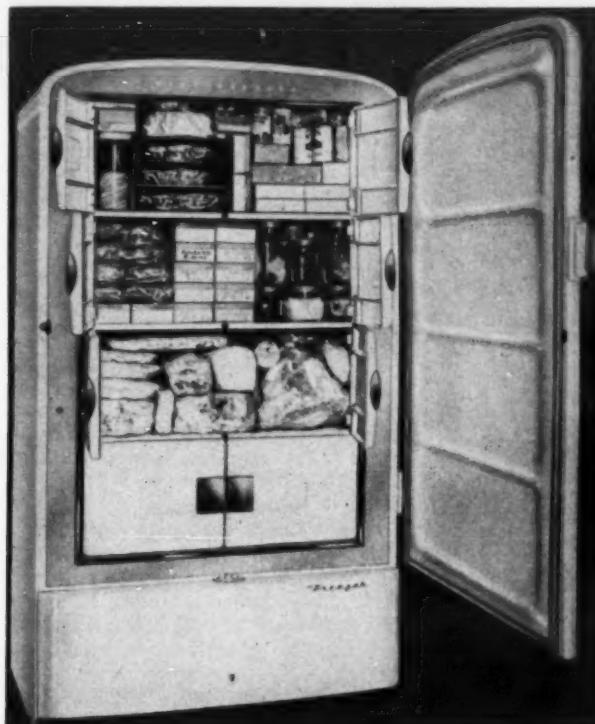
A 7½-cu. ft. Frost Free model, DFE-75, was shown also. It is the lowest-priced Frost Free refrigerator and includes automatic disposal of defrost water.

Two deluxe equipped conventional models, a 9-cu. ft. (DE-9) and an 8-cu. ft. (DE-8) are in the 1953 line.

All the refrigerators have new, larger, and heavier doors and a newly designed self-aligning latch mechanism.

Three models, 8½, 12, and 18-cu. ft. upright home freezers, will make up the freezer line.

A removable pastry rack for stor-



WESTINGHOUSE upright freezer features inventory control, new storage aids.



WESTINGHOUSE two-door refrigerator-freezer with automatic defrosting and automatic temperature control.

age of pies and cakes, an adjustable sliding shelf, and a bottom roll-out drawer for large and odd-shaped packages are among the new storage aids in the 1953 upright freezers.

Drop-down inner doors for convenience in loading and arranging compartments are on the 8½ and 12-cu. ft. models. The 18-cu. ft. model has center opening doors.

The 8½ and 12-cu. ft. freezers include a freezing shelf that provides 10 to 15° below zero (F.) for fast freezing. The storage compartments are well cooled and are maintained at zero or lower temperature. These temperatures for both the freezing shelf and storage compartments are kept at the normal setting on the control.

ARCTIC BLUE INTERIORS

The interiors of all models are in Arctic Blue, including inner door panels, breaker strips, and drop-down doors for the compartments.

The Freez-File inventory recorder is used on all three upright home freezers. It is located on the outside door of the freezers where the homemaker can determine what is in the freezer and where it is located before opening the freezer door.

To use the Freez-File, the user merely slides the file section from the holder and dials the selector to the food classification she wants, and the file opens and tells her where food is located, when frozen and how much she has.

To make notations easy, the selector of the file is marked into seven frozen food classifications: Meats, Vegetables, Fruits, Poultry, Fish, Pastry, and Miscellaneous. The plastic record sheets are further marked for type of food frozen, date frozen, where stored, quantity stored, and quantity remaining.

"With such a handy and easy-to-use guide, the homemaker can make the fullest use and maximum savings possible with her home freezer,"

Meilinger pointed out.

While defrosting in the 8½ and 12-cu. ft. freezers is seldom required, it is done "quickly and easily."

All frost in these models only collects on the quick freeze shelf and eliminates the scraping or scooping of frost and the need to remove any frozen foods from the storage compartments, Meilinger said. The defrost water collects in the defrosting tray beneath the freezer compartment where it is easily removed.

RANGE MODEL HAS 'AUTOMATIC COROX'

The new range surface unit, called "Automatic Corox with Electronic Eye," will be available on the top model, the Commander double oven range (AD-774), reports R. M. Beatty, manager of the electric range department.

The full line of 1953 electric ranges includes five additional models, one of which is a new 30-in.-wide deluxe model with a 24-in. oven, called the "Imperial 30."

Food can be warmed, boiled, or fried on the Electronic Eye surface unit without the danger of burning or scorching them, Beatty said. And this holds true even if all the water is boiled away and no matter how over-long the food remains cooking on this surface unit, he added.

"Cooking-without-looking becomes a reality," Beatty explained, "because the new electronic unit literally measures the temperature of the food cooking in the pan and maintains the necessary temperature automatically by turning the current off and on as needed."

"The supervised off-and-on action prevents the excessive temperature build-up in the cooking utensil which causes foods to burn or scorch. The result is that there is never either too much heat or too little heat for the cooking operation."

"On this unit," he continued, "only one setting of the control dial is

required for any given cooking operation. The Electronic Eye surface unit is controlled by a single dial, marked off into three basic cooking zones: Warm, Boil, and Fry. Each of these three zones, in turn, is further subdivided into 'low,' 'medium,' and 'high.'

The settings on the dial have been determined on the basis of temperatures required for each cooking operation.

ELECTRIC DISHWASHERS

A newly-styled electric dishwasher sink with a bowed-design front will be available in three models, in addition to the new portable. The models are a 48-in. dishwaaher sink, a 24-in. free standing model, and an under-counter model.

The new portable can at any time be permanently installed by removing the casters and making a few minor changes, the company said.

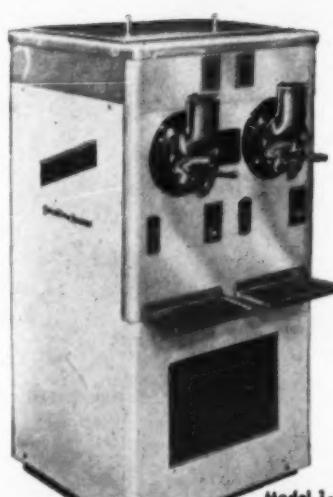
These dishwaahers will hold a service for eight or the service for a dinner for four and all the pots and pans, and will wash and dry them.

Addition of a 50-gal. table top electric water heater in a 24-in. wide cabinet marks the electric water heater line for 1953. Simplified connections for the table top line, which includes a 30 and 40-gal. model, makes their installations in existing homes easy, it was stated. The 24-in. cabinets for all these models are designed to fit standard kitchen base cabinet dimensions.

A new short-length "Waste-Away" food disposer designed to meet the installation needs of homes with close drain connections at the kitchen sink was also reported. This model, G4-S, has a suggested price of \$129.95.

A new combination 115-230-volt electric clothes dryer will replace the separate models formerly used for these voltages. It will be in the same cabinet as the current 1952 model. The only design change will be the use of a second dial on the dryer.

MORE Service- LESS Servicing!



Model 1-131-A20

With SWEDEN-

TODAY—after more than 17 years' leadership in the ice cream freezing and dispensing field—SWEDEN Speed Fountain Freezers are still "years ahead," giving owners consistent, trouble-free service.

It's an old story—of advanced design and superior engineering, of pioneer testing and development. Automatic freezing controls for simple operation; sturdy construction and accessibility of all parts for quick cleaning are standard SWEDEN features that add up to MORE and LONGER service... LESS upkeep expense.

Dispensing Soft Ice Cream, Frozen Custard and other long-profit specialties with amazing speed, SWEDEN eliminates bulk shrinkage, requires less cream weight-per-serving. Dipping, handling and scraping are eliminated; both food and labor costs slashed 50% and more.

And remember—the SWEDEN line is really complete. There's a model to meet every need, every budget. SWEDEN's model variety adapts the machine to the operation, not vice-versa. SWEDEN Speed Fountain Freezers are profitable to own and operate... investments that pay for themselves out of EXTRA profits!

SWEDEN SPEED FREEZERS

the
FOUNTAIN
FREEZER

For more information, write today to:

SWEDEN FREEZER MANUFACTURING CO.
DEPT. 8-1, SEATTLE 99, WASHINGTON

KASON HARDWARE CORPORATION
127-137 W. about St. • Brooklyn 5, N.Y.

Catalog available. "Hardware for the Commercial Refrigeration Industry," write us today. Manufacturers of a complete line of commercial and domestic refrigeration hardware and accessories.



INSIDE RELEASE HANDLE
• Assures easy exit from inside
freezer. Screws on inside of
door, eliminates drilling
through door and possible
loss of refrigeration. Also
equipped for installation with
the IM-199 Safety Device.

Catalog available. "Hardware for the Commercial Refrigeration Industry," write us today. Manufacturers of a complete line of commercial and domestic refrigeration hardware and accessories.



KASON HARDWARE CORPORATION
127-137 W. about St. • Brooklyn 5, N.Y.

Three models, 8½, 12, and 18-cu. ft. upright home freezers, will make up the freezer line.

A removable pastry rack for stor-

Amana Expansion--

(Concluded from Page 1, Column 2) would begin a program of franchising 8,000 new dealers.

"The accomplishment of our objective under the Amana Plan requires a sharp raising of the standards of what constitutes an acceptable Amana dealer," Hinchliff declared. "Deadwood in our dealer organization should be eliminated and increased emphasis should be placed on dealer effectiveness."

Merlin E. Morris, advertising manager, reported that Amana planned to spend a record-breaking \$2,250,000 on advertising, more than twice what was spent in 1952, its previous top year. This budget, he claimed, would be the largest ever devoted to the exclusive promotion of food freezers.

In addition to outlining its largest national advertising schedule, to be topped by regular page and half-page insertions in *Life* and *Saturday Evening Post*, Morris also presented details of enlarged trade and farm magazine programs, an expanded cooperative ad program to include transcribed radio spots, a new dealer identification program, a distributor contest, and an enlarged dealer kit consisting of about 30 new pieces of literature, promotion material, and displays.

UNITS WILL START AS THEY ARE COMPLETED

Individual elements of Amana's enlarged facilities will be placed in operation as they are completed, Foerstner said. A new electronic finishing line—believed to be the first to be used by a freezer manufacturer—will be completed in May and immediately will make possible increasing output by 30%.

As different parts of the freezer shell pass on moving overhead conveyors into the finishing line they will trigger "electric eyes" which in turn will activate automatic paint sprayers. Operating in predetermined cycles, the nozzles will spray paint just as long as the part will be in range—which will be just as long as it takes to be thoroughly covered.

Other highlights of the plant expansion include:

1. Eight high-speed presses to form doors and other large parts for Amana freezers. These presses cost as much as \$100,000 each.

2. Installation of steel slitting, shearing, and leveling facilities which will make it possible for Amana freezers to be made from continuous 10-ton ribbons of coiled steel, direct from the steel mills.

3. Doubling of railroad car loading facilities, from an eight to 16-car capacity, and enclosing them and the motor freight loading docks.

4. A new warehouse.
5. A new service building.

ASSEMBLY LINE EXPANDED

6. Expansion of assembly line facilities.

7. Enlarged employee welfare facilities already nearing completion, including a new modern soundproof cafeteria, new restrooms, and showers.

Amana's directors made the decision to expand the plant last spring, Foerstner said.

"They had faith in the freezer market, they had faith in the entire Amana organization and the position it would play in the freezer market, and they foresaw that food freezers would become the most wanted appliance on the market today," he recalled.

Amana's executive vice president called for more accurate rating of freezer capacities by all manufacturers, asserting that the difference between the actual and claimed capacity of several other manufacturers' freezers is as much as a full cubic foot.

SEES GOOD YEAR AHEAD

"1953 is the year of opportunity for Amana distributors and dealers," Hinchliff said. Calling "timing" the "fourth dimension in selling," he said that Amana dealers and distributors stood on the threshold of the "greatest profit year in freezer history."

Walter Wendler, assistant sales manager, after reviewing the top selling features of Amana freezers, presented a new easel-type product book, incorporating "prospect participation," for dealer salesmen to use in selling both upright and chest freezers.

To point up the need for improved selling, improper and proper selling techniques used by dealer salesmen in handling the "casual prospect"

were dramatized for the distributors.

Robert F. Dee, market research manager, presented plans to intensify Amana dealer coverage throughout the country. Analyses of their territories were presented to the distributors.

BUYERS' MARKET COMING

W. J. Dickinson, director of sales training, warned that a buyers' market in freezers was on the way. He called upon the distributors to step up their sales training efforts for their own salesmen and their dealers.

Amana's 1953 sales training program, Dickinson said, includes new color sound slide films, a new sales training manual, and a new product selling book.

Barbara Johnston, coordinator of Amana's home economists, urged distributors to establish their own home economics departments, and offered the help of Amana's field home economists in training the distributors' personnel.

The periodic visits by these field home economists no longer were able to satisfy distributors' requests, Mrs. Johnston said. Hence the recommendation to distributors to set up their own departments.

In addition to helping train distributor home economists, Amana will furnish a new continuing home economics procedure manual, to help guide distributor home economists in the execution of their programs.

VARIETY OF PROMOTION

Amana's home economics coordinator also introduced a new 64-page frozen food cook book with 365 freezer menus and more than 90 freezer recipes; an educational booklet "How to Get the Most Out of Your Freezer," a 25-recipe Ann McGregor Recipe Roundup for use as demonstration giveaways and as self-mailers; and a new complete home economist demonstration kit, which includes, press releases, ad mats, radio spots, window posters, registration cards, lapel tags, gift suggestions, "thank-you" letters, and follow-up suggestions.

During the meeting, Foerstner was presented with the Fashion Academy Award for the "outstanding design and distinctive styling" of Amana freezers. This is the first time the Fashion Academy Award has been awarded to a manufacturer of food freezers, it was said.

A panel discussion on the "Evolution of Food Plan-Freezer Selling" was conducted under the leadership of Bill Hull, of ZCMI Wholesale Distributors, Salt Lake City.

Other speakers, all Amana distributors, included Ed Nystrom, Amana-Seattle, Seattle, Wash.; William Campbell, The Parker Co., Denver; and William Reedy, Edwards-Harris Co., Atlanta.

New Westinghouse Plant To Be Devoted Entirely To Civilian Goods Output

COLUMBUS, Ohio—The Navy Department and Westinghouse Electric Corp. jointly announced a change in their production planning for the new Westinghouse plant now under construction at Columbus.

The original plans were to devote as much of this new, dual-purpose, Westinghouse-owned factory as necessary to the production of component parts for jet engines, with the long-range intent that it would eventually be used for the manufacture of major electrical appliances.

Recent changes in jet engine requirements will permit the entire plant, scheduled for completion Aug. 1, 1953, to go into production of civilian goods.

Should there arise a national emergency of such magnitude as to require the industry to devote its facilities to products for the military services, this plant then will be converted to the manufacture of component parts for jet engines. To insure that the plant will be ready for such an assignment, the building will be constructed to include all features and services needed for this military product.

An additional production line will be installed in the Navy-owned, Westinghouse-operated Kansas City, Mo. jet engine plant so that jet engine production facilities will be ample for requirements under present conditions.

NARDA Meets Jan. 12-13 At Conrad Hilton, Chicago

New Philco Plant--

(Concluded from Page 1, Column 4) production by 50% and double the company's home freezer capacity.

When in full operation, the new plant together with present Philco operations at Connersville, will give employment to approximately 3,000 workers, he said. The new plant will have 430,000 sq. ft. of floor space.

The present Philco plant at Connersville will be re-equipped to step up capacity for the entire refrigeration manufacturing operation.

Balderston told the convention that Philco sales in 1952 exceeded \$360,000,000—an 18% increase over 1951.

If general business continues at present levels, Philco has an opportunity to manufacture and sell more than 1,000,000 television receivers in 1953, Balderston predicted, in view of the planned opening of about 100 new television broadcasting stations.

He reported, further, that a new plant for the manufacture of television receivers will go into operation in Philadelphia this month, almost doubling Philco's TV set production capacity.

"When these plants are fully completed," he said, "Philco will have capacity in all divisions to produce $\frac{1}{2}$ billion dollars worth of appliance and electronic products annually."

\$50,000 Warehouse Fire

YORK, Pa.—A warehouse owned by C. B. Klinedinst, appliance dealer, was swept by an early morning fire which caused damage estimated by firemen at \$50,000. The blaze raged for five hours in sub-freezing temperatures.



J. S. TWIST



L. O. BOWER

Sherer Appts.--

(Concluded from Page 1, Column 3) vice president in 1947. He was added to the board of directors in 1949.

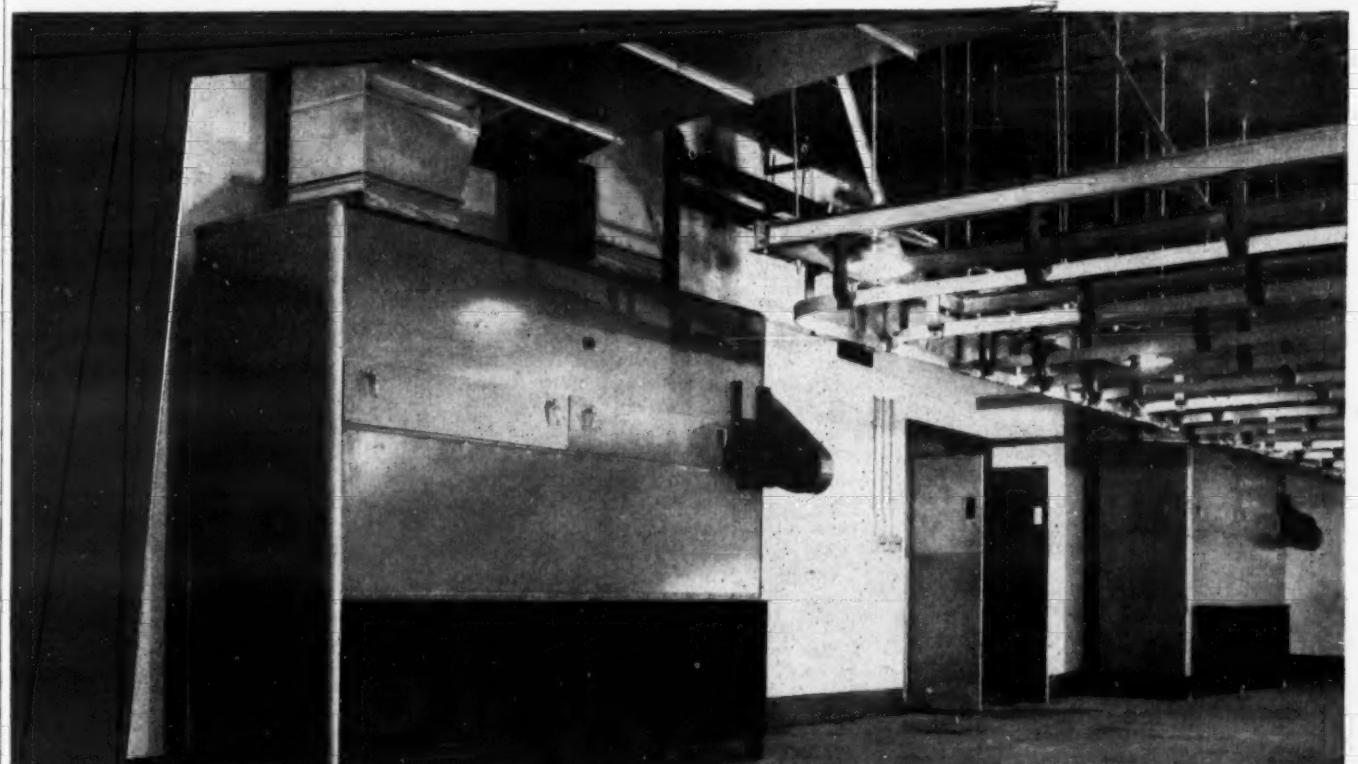
Since 1950, Twist has been sales manager with direct supervision of the company's distributing organization. In his new capacity he will assume over-all charge of zone sales manager activities as well.

In a further move to strengthen the company's home office sales organization, Robert O. Scheible has been transferred to sales staff duties.

Servel Road Show--

(Concluded from Page 1, Column 5) would take the "1953 Show of Stars" to 30 cities, starting with Boston and New York City on Jan. 21.

The five-hour show will be a full-scale musical production featuring an all-professional, all-Broadway cast. All performances will be confined to company distributors, dealers, and utility representatives. One company will travel through the south and the other through the west.



big product
cooling job?...

BUSH PRODUCT COOLERS WILL INSURE A GOOD JOB

Bush units are constructed around rigid angle iron frames which support bearings, shaft and motor. This construction guarantees alignment . . . eliminates fan troubles, and insures quiet operation.

Large amount of coil surface allows low air velocity, minimizing dehydration of produce. Coils are circuited to provide maximum capacity with minimum pressure drop.

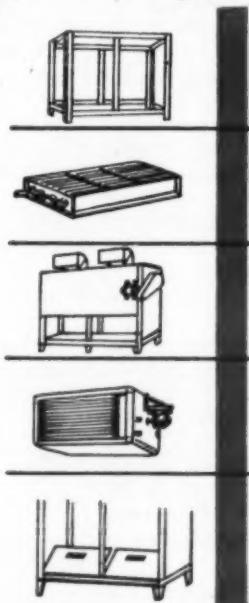
Bush product coolers are available in floor or ceiling models, with top or front outlets and directional louvers.

Low temperature water defrost units are equipped with ample water spray nozzles, insuring complete coil coverage—positive defrosting. Baffles on air inlet eliminate splashing during defrosting.

Wide range of sizes and styles makes Bush Product Coolers your best bet on all cold storage applications: fruit, meat and produce packing and storage plants . . . fur and fabric storage, frozen foods, locker plants . . . dairy products, candy storage, fish storage, etc.

CONSULT YOUR NEAREST BUSH SALES ENGINEER ON ANY PRODUCT COOLING PROBLEM. HE'LL BE GLAD TO HELP OUT.

WRITE FOR COMPLETE INFORMATION.



BUSH MANUFACTURING COMPANY

WEST HARTFORD 10, CONNECTICUT

